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Long Lots in New Mexico and Texas:  
The French Connection, 1693-1731

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in partial fulfillment of the requirements for the  
degree of  
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By

Jeffery Edwin Roth

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Long Lots in New Mexico and Texas:  
The French Connection, 1693-1731

A Dissertation Approved for the  
Department of Geography

By

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## Acknowledgments

This dissertation is dedicated to Richard L. Nostrand my advisor and friend. Dr. Nostrand never gave up on me and was patient beyond any expectation. I am fortunate to have such a great mentor and consider myself a geographer from the Nostrand School. I owe an enormous debt of gratitude to numerous other people who have helped me complete this dissertation, my doctorate, and my education in general. My first great teacher, Judy Neal of Arlington, Tx., instilled in me the desire to be a good scholar which I will never lose. I was lucky to have a few more excellent teachers while attending Stephen F. Austin State University including Allen Richman, Elizabeth Malpass, and Scott Bills who died in 2002. Many more helped me at SFASU, especially Darrel McDonald, Carolyn Spears, and Rachal Galan. I recognize what they and many others did for me, and my appreciation is heartfelt and sincere. At the University of Oklahoma, Bruce Hoagland and others taught me valuable lessons that made me a better geographer and helped improve this dissertation. Along with the rest of my committee, I would especially like to thank Fred Shelley who contributed a great deal on short notice.

While trying to write this dissertation, I had a terrible accident. It was altogether unclear whether I would recover let

alone finish. Some great people provided the encouragement I needed to mend and complete my degree. My Mom, Gloria Roth, has unfailingly supported me, and I love her very much. Walter “Pat” Allen of Nacogdoches, Texas, has been an inspiration and is a brother to me. Andy Choate, esteemed singer and songwriter, repeatedly reminded me of my friends and support. Rick Kimbrough graciously opened his door to me whenever I was doing research in New Mexico and is a great friend. Most of all, I want to thank Emily Conrad who literally saved my life. When I was surrounded by darkness, she turned on the light. Emily helped me more than she knows, and I completed my dissertation and I’m a better person because of her.

Writing a dissertation utilizing source material from over three centuries, written in three languages had several problems. Among them, variant spellings for the same words appeared in different sources. When used in a quote, they are reproduced as originally written. Elsewhere, I attempted to use the most common spelling for names and other words. For example, I referred to Don Fernando Perez de Almazan as “Almazan” because he was often named that way in the literature. I used primary source material whenever possible and otherwise the best source available. In addition, tildes and accents have been systematically omitted.

**Long Lots in New Mexico and Texas:  
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## Abstract

Long lots are linear or rectangular agricultural fields, so configured to give access to water courses or roads. They exist in France and where French people settled in North America, primarily Quebec and Louisiana. They are rarely found in Spain or New Spain including Mexico; however, they came to exist among Spanish people on New Spain's northern frontier in New Mexico and Texas. My purpose is to marshal the historical evidence to show that long lots diffused from Frenchmen to New Mexico after 1693 and to San Antonio after 1731. Circumstantial evidence demonstrates that diffusion rather than independent invention provides the most likely explanation for the presence of long lots in early New Mexico and Texas.

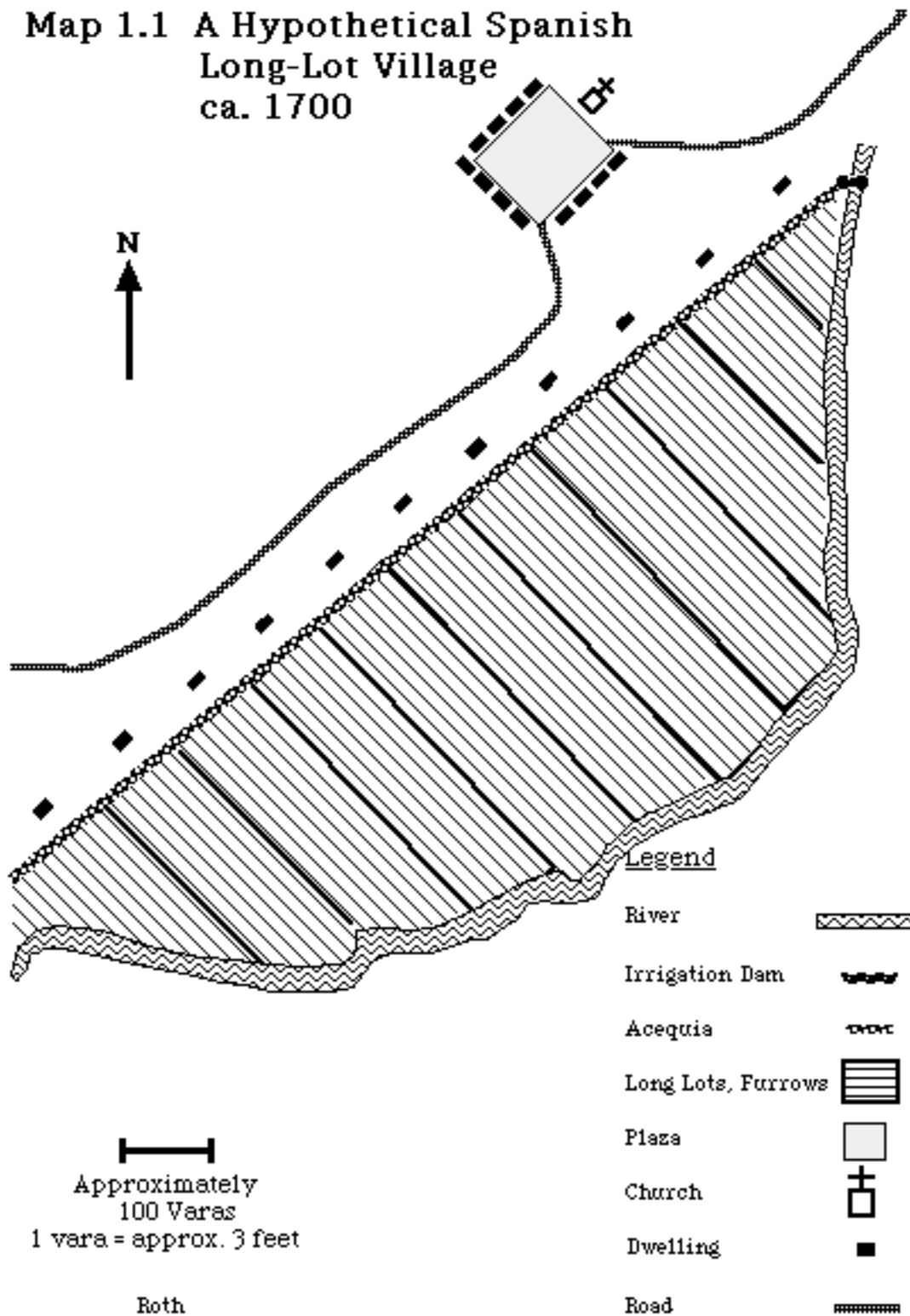
# Chapter 1

## Introduction

The long lot is a rectangular or ribbon-shaped unit of land with varying proportions that stretches away from a road or a water feature. Dividing large parcels of land into groups of long lots proved to be a good way to distribute individual plots in colonial settings. Importantly, the long lot system provided access for the largest number of settlers to transportation, and to neighbors for communal support. In addition, it offered a variety of soils and vegetation types that changed as one moved away from a river or stream course. Along with the benefits for the landholder and community, authorities could grant numerous individual plots easily, fairly, and without complex surveying.

The advantages of long lots prompted their adoption and continued use by several cultural groups in North America. Whether used in dry or wet environments, long lots were easily adapted to most any locality and provided officials with a system that delivered easy, equitable access to land and water. After surveyed, long lots accommodated population growth because old plots could be subdivided and new tiers of lots could be added. In New Mexico, a common settlement pattern emerged around long lots (Map 1.1).

**Map 1.1 A Hypothetical Spanish  
Long-Lot Village  
ca. 1700**





In addition to the ribbons of farm land that stretched away from irrigation ditches in a linear fashion, each village had common pastures for cattle and livestock. Along roads and rivers, linear hamlets or villages emerged.

In New Mexico, linear villages with long lots appeared following 1693, after Governor Diego de Vargas laid out a new type of Spanish settlement designed to be self-sufficient. Until the Pueblo Revolt of 1680, which drove the colonists out of New Mexico for a generation, the Spanish had a tradition of exploiting indigenous people for agricultural labor in their northern colonies. Utilizing various methods of coercion, they controlled the farmlands once held communally by the Pueblo Indians, and they created a few scattered farmsteads of their own which were often worked by Indians. Importantly, there is no available evidence to suggest that any long-lot landscapes appeared until after the Reconquest in 1693. Even after 1693, the Spanish followed old patterns and used indigenous people to supply their needs until a substantial social innovation occurred. Adhering to new laws, Vargas separated the colonists and Pueblos after 1695, and the Spanish increasingly engaged in their own agrarian pursuits. Much was new, including the way Spanish people apportioned and lived

on the land in New Mexico and later in Texas.<sup>1</sup>

After 1695, the Spanish engaged in a reformed style of colonial activity which emphasized both fair and equal land occupation as well as agricultural production and self sufficiency on their northern frontier. Feudal traditions that had influenced land allocation by social class and race started to fade. At about the same time, the long lot emerged in New Mexico along with the reforms instituted by Vargas. This agricultural landscape pattern and associated agrarian lifestyle was new to the Spanish in this region; however, the French used long lots at home for a substantial period of time and in their colonies beginning in the early 1600s.<sup>2</sup>

French colonial activity produced long lots most everywhere the French settled in North America. Curiously, two small regions with this settlement pattern came to exist in remote New Mexico and Texas. Because long lots were not used in Spain and in New

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<sup>1</sup> David Weeks, "The Agrarian System of the Spanish Colonies," *The Journal of Land and Public Utility Economics*, Vol. 23, No. 2, 1947, pp. 153-168. Hereafter cited as Weeks, "The Agrarian System of the Spanish Colonies."

<sup>2</sup> Terry G. Jordan, "Antecedents of the Long-lot in Texas," *Annals of the Association of American Geographers*, Vol. 64, No. 1, March 1974, pp. 80-81. Hereafter cited as Jordan, "Antecedents of the Long-lot in Texas." Karl W. Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots: Different Avenues to Historical Diffusion," *Annals of the Association of American Geographers*, Vol. 92, No. 3, 2002, pp. 451-464. Hereafter cited as Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots." Richard Cole Harris and John Warkentin, *Canada before Confederation; A Study in Historical Geography*, New York: Oxford University Press, 1974, pp. 39-41. Hereafter cited as Harris and Warkentin, *Canada before Confederation*.

Spain, including present-day Mexico, questions emerge. How did long lots arrive in New Mexico and Texas, and why did the Spanish use them in their outposts around Santa Fe and San Antonio? Substantial evidence indicates that long lots diffused from the French to the Spanish in both places. This diffusion occurred as the Spanish and French governments officially contended for the region. At the same time, their colonists cooperated and shared as they settled between the 1690s and 1763--when the Spanish gained control of Louisiana. My focus in this dissertation is to examine the earliest adoption of long lots as a standard way of dividing the land in the riverine regions of New Mexico and Texas between 1693 and 1731. This dissertation offers an analysis of why long lots emerged after the Reconquest of New Mexico in the 1690s, and later in Texas. In addition, it describes how long lots probably diffused from the French to the Spanish in both New Mexico and Texas.

### **Jordan and Carlson**

Geographers Terry G. Jordan (Jordan-Bychkov after 1997) and Alvar W. Carlson have contributed substantially to our understanding of the long lot and its place in Texas and New Mexico, respectively. However, both Jordan and Carlson

postulated that the first long lots of San Antonio and New Mexico were invented locally and independently by the Spanish. They ignored or minimized the earliest French influence in both regions. Both asserted that adjustment to local environments explained the initial adoption of long lots by the Spanish. Their work has created the need for, and has defined the parameters of, this study.

A deeper historical context reveals substantial French influence on the Spanish frontier, and given this there emerges a need for explaining long lots among the Spanish beyond independent innovation. In this dissertation, I review how officials used long lots in New Mexico and Texas decades earlier than expected, and I strongly suggest that the source for the rational land division system was French rather than local independent invention by the Spanish arrived at by Jordan and embraced by Carlson.

During the early 1970s, Jordan identified what he called a previously unnoticed region of long lots laid out by the Spanish in Texas during 1731. He was the first to attempt to solve the problem of how this survey system, associated with the French but with no Spanish precedent, arrived in only a limited area of Spain's North American colonial possessions. Along with defining long lots as cadastral units at least three times deeper than wide, he

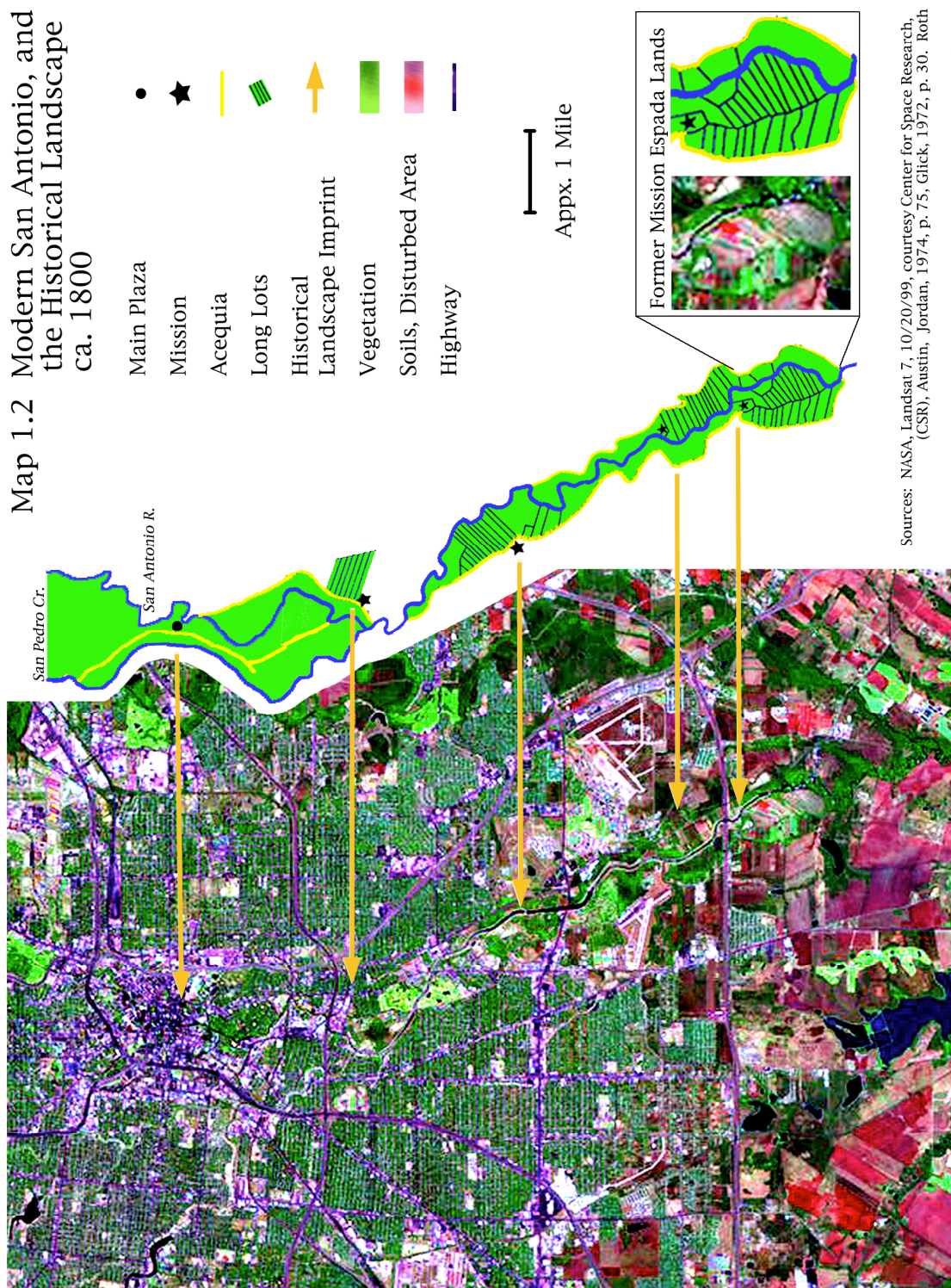
identified the earliest surveys, traced the later diffusion of long lots to Texas, and measured the influence of this settlement form in the present cultural landscape.<sup>3</sup> Events of history largely obliterated any lasting impress of the earliest long lots in Texas, although Jordan points out that modern roadways follow directions corresponding with these survey lines (Map 1.2). Because of the lack of colonization and settlement during the eighteenth century, apparently few if any long lot surveys were conducted again until after 1794.

During the 1720s, Spanish officials planned to secure Texas with hundreds of colonists from the Canary Islands, even though few actually emigrated. As Jordan notes, the long lots distributed to the sole group of Canary Islanders, who eventually arrived in 1731, probably influenced the surveying of new farms during the secularization of mission property, 1794-1824.<sup>4</sup> In Map 1.2, which contrasts 1999 Landsat imagery with San Antonio's early field patterns, long lots laid out during secularization appear to be remarkably well preserved, especially near Mission Espada. Describing these long-lot grants formalized in 1824 after thirty years of undefined ownership, Jordan writes, "These mission long-lots were probably inspired by the earlier (1731) Canary Islander

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<sup>3</sup> Jordan, "Antecedents of the Long-lot in Texas," pp. 70-71.

<sup>4</sup> Jordan, "Antecedents of the Long-lot in Texas," pp. 82, 84, 86.



*suertes* which were adjacent on the north.”<sup>5</sup> Jordan also identifies a French connection when writing about diffusion during the late eighteenth century, saying that “the key to the Texan long lots probably lies in France and the French North American colonies.” He reports further:

. . .those [long lots] established in 1767 in the Rio Grande valley were an imitation of the Louisiana pattern. By the later date, the Spaniards ruled Louisiana and had first-hand experience with the *Flusshufen* settlements of the lower Mississippi and Red rivers, though Jose de Escandon, the colonizer who founded the Rio Grande settlements, apparently never visited Louisiana.<sup>6</sup>

Jordan described the French origin of long lots occurring in Texas in the later half of the eighteenth century. In this study, field work contributes little to understanding relevant early eighteenth-century land use in Texas, and I use present-day field verification only tangentially.

With respect to the origin of long lots in Texas during 1731, several important details in Jordan’s conclusions give rise to this dissertation. He believed the earliest long lots were independently invented by the Spanish. Jordan writes:

It seems likely to me that the San Antonio long-lot *suertes* of 1731 were not diffused from Louisiana, but

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<sup>5</sup> Jordan, “Antecedents of the Long-lot in Texas,” p. 75. The Landsat 7 image, Oct. 10, 1999, is courtesy of the Center for Space Research (CSR), “Texas View,” project, University of Texas, Austin.

<sup>6</sup> Jordan, “Antecedents of the Long-lot in Texas,” p. 80.

were an independent invention, prompted by the peculiarities of the local environment. . .<sup>7</sup>

Jordan found that the early long lots of San Antonio stretched between the San Antonio and San Pedro rivers with an irrigation ditch transecting the high ground between the rivers. His only evidence for independent invention was that French long lots typically focused on a single river.<sup>8</sup> My interpretation is that Spanish officials imitated the French design after a decade of observation and modified the long lot system to conform to San Antonio's dry riverine environment. Jordan never identified what Spanish long lots in San Antonio and French long lots in Natchitoches had in common: access to water, ease of use by officials, efficiency, and rational fairness. Long lots provided equitable access to water both for transportation in eastern humid areas and for irrigation in the western dry region. When used by the Spanish, long lots efficiently allowed irrigation water to be allocated to each farmer with surpluses returning to the river in furrows. French transportation and commerce moved efficiently by rivers. Residents at the heads of long lots each had access to rivers for transportation and other purposes. Importantly, Jordan offered no direct or circumstantial evidence of independent invention by the Spanish.

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<sup>7</sup> Jordan, "Antecedents of the Long-lot in Texas," p. 82.

<sup>8</sup> Jordan, "Antecedents of the Long-lot in Texas," p. 82.



Available historical evidence suggests that the long lots of San Antonio were patterned after French methods of land distribution observed by local Spanish officials who frequented Louisiana between 1721 and 1731. Isolated when they planned the initial colonization of Texas, they received little guidance from Spain. In need of a system for equitable distribution of individual farm plots that provided access to water for irrigation, evidence suggests that local Spanish officials used their authority to adopt French procedures for land alienation in their own colonization efforts.

In his study of New Mexico, Carlson adopted Jordan's ideas on early long lots diffusion. Carlson embraced Jordan's assumptions about independent invention and applied them to New Mexico without citing any direct evidence. Carlson dismissed the French role in the Rio Arriba.<sup>9</sup> He determined, without presenting evidence, that the long lot originally emerged in the upper Rio Grande Valley in about 1751 and "... apparently resulted from knowledgeable assessment of local physical conditions."<sup>10</sup> I will show that long lots originated earlier.<sup>11</sup>

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<sup>9</sup> Alvar W. Carlson, *The Spanish American Homeland Four Centuries in New Mexico's Rio Arriba*, Baltimore: The John's Hopkins University Press, 1990, pp. 31-32. Hereafter cited as Carlson, *The Spanish American Homeland*.

<sup>10</sup> Alvar W. Carlson, "Long Lots in the Rio Arriba," *Annals of the Association of American Geographers*, Vol. 65, No. 1, 1975, pp. 53-55. Hereafter cited as Carlson, "Long Lots in the Rio Arriba."

<sup>11</sup> At this time there is no other known use of long lots by the Spanish in North America during the colonial period; however, others may exist and are as of yet undiscovered.

Carlson continued:

The long-lot survey system appears to have been developed within the Rio Arriba by local Spanish government officials to accommodate the settlers of the colony grants in the mid-1700s. Jordan found no antecedents of this field pattern in Spain, nor was it used by the Spanish in Mexico and Arizona.<sup>12</sup>

Carlson never described the process of adoption or first use and gave no information about the hypothetical innovators; however, he agreed with Jordan and provided evidence that long lots were absent in Spain, Mexico, and Arizona.

In the northern part of New Mexico, Carlson observed compact villages that extended into line settlements with long-lot fields focused on water and roads. These long-lot farms proved to be a basis of stability for villages and an important factor in keeping the Spanish population in the Rio Arriba.<sup>13</sup> He recognized a French connection but minimized it as he wrote:

Although the Spanish officials in Santa Fe had limited contact with French traders and military men in

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<sup>12</sup> Carlson, "Long Lots in the Rio Arriba," p. 53. Carlson cites Jordan and credits the Spanish with independent invention in San Antonio and later New Mexico, see Jordan, "Antecedents of the Long-Lot in Texas," pp. 71-82.

<sup>13</sup> Carlson, "Long Lots in the Rio Arriba," p. 57. Carlson cites Richard L. Nostrand, "The Hispanic-American Borderland: Delimitation of an American Culture Region," *Annals of the Association of American Geographers*, Vol. 60, 1970, pp. 638-661. Nostrand does not mention long lots in this article. He does describe the cohesive and stable Spanish community. On several field trips, Nostrand described village patterns in the Pecos Valley between San Miguel and El Cerrito. On these trips we discussed a French connection. These discussions gave rise to this dissertation. It was impossible to ignore the similarities between Nostrand's descriptions and those of the French village patterns in places like Indiana and Louisiana.

the 1700s, there is no indication that the French influenced them [the Spanish] to develop a long-lot system after that found in French Canada and America.<sup>14</sup>

Still, Carlson described a very French-like landscape in New Mexico without adequately determining the source.

Carlson seemingly never identified the influential Frenchmen who arrived with La Salle and found their way to New Mexico in 1693. Two, Jean L'Archeveque and Jacques Grollet, later known as Juan Archibeque and Santiago Gurule, lived in Santa Fe from the time of the Reconquest. That these Frenchmen were in New Mexico has been known by historians for more than a century. Carlson seems to have assumed that because French imperial and trade efforts failed, so did a transfer of material and intellectual culture.

Carlson found another reason for independent invention: "French long-lots were much larger than those found in the Rio Arriba mostly because they were laid out in arpents (1 arpent equals 192 feet)."<sup>15</sup> Despite this claim, individual long-lot farms in both New France and New Mexico were remarkably similar in many respects, and the unit of measure alone seems to hold little significance. Cole Harris describes long lots of 50-100 acres to be "the characteristic concession of Canada."<sup>16</sup> A wide variety of

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<sup>14</sup> Carlson, *The Spanish-American Homeland*, pp. 31-32.

<sup>15</sup> Carlson, *The Spanish-American Homeland*, p. 32.

<sup>16</sup> R. Cole Harris, editor, *Historical Atlas of Canada*, Vol. 1, Toronto: Univ. of Toronto Press, 1987, p. 115.

documents accessible in the State Archive of New Mexico show no substantial difference between Spanish and French long lots. Importantly, both the French and Spanish sized their long-lot plots to meet the needs of an individual family. Carlson concluded: “There is no indication that the French influenced Spanish settlement in the Rio Arriba.”<sup>17</sup> In light of the presence of influential Frenchmen in New Mexico, this conclusion should be revisited.

Together, Carlson and Jordan described the first long lots of San Antonio and New Mexico as invented locally and independently. Both claim that adjustment to the local environment prompted initial long-lot adoption, and both overlooked evidence of cultural exchange between the French and Spanish in Texas and New Mexico. Subsequent chapters in this study will demonstrate that long lots originated in New Mexico decades before previously believed and were a social innovation by the Spanish based on French knowledge. Another connection later in Texas between the French and Spanish seemed to cause a similar change around San Antonio where plots of land were granted to Spanish immigrants of lower social classes based on the needs of individual families.

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<sup>17</sup> Carlson, “Long Lots in the Rio Arriba,” p. 55

## Sources

To answer the research questions set out above, I use a variety of primary and secondary source materials. I rely most heavily on primary sources and rare regional histories from the following archives: The Cammie G. Henry Research Center, Watson Library, Northwestern State University, Natchitoches, Louisiana; The East Texas Research Center, Steen Library, Stephen F. Austin State University, Nacogdoches, Texas; The State Archives of New Mexico, Santa Fe, New Mexico; and The Western History Collections, The University of Oklahoma, Norman, Oklahoma. The primary source materials utilized at these facilities include government records such as censuses, deeds, correspondence, and official orders. Regional histories also proved to be extremely helpful. Largely produced by local amateur scholars, these studies contain a wealth of detail on culture too often overlooked.

The work of several geographers and scholars facilitated this work. Foremost among them is Karl Butzer, who contributed to understanding the diffusion of agrotechnology to New World landscapes. While writing specifically about colonial era Canada, Butzer conveys other broad themes important to the discussion of the origin of long lots in Santa Fe and San Antonio. Importantly, he underscores the value that useful material culture and information

had for individuals and small groups when planting roots on a frontier. On a frontier, social structure adapted more readily and ideas diffused more easily when a need or niche was available.<sup>18</sup> In New Mexico the niche became available when the comparatively inexperienced, urbanite Spanish adopted a more agrarian lifestyle after 1693. In my bibliography, I cite the sources used to determine the origin of long lots in Texas and New Mexico.

Early English-speaking surveyors lamented how the French and Spanish used verbal conveyances to record land grants. Written documentation for land claims before the nineteenth century are often absent. Verbal land grant descriptions and time make reconstructing the origins of long lots a detective story loaded with circumstantial but telling evidence.

The mystery of how long lots diffused to the Spanish in Texas and New Mexico begins with an account of settlement patterns in New Mexico from the time of its conquest in 1598 through the Pueblo Revolt of 1680 and the final Reconquest of 1693. Evidence from before 1680 shows irregular plots of land on irrigation systems worked primarily by Pueblo Indians for the Spanish. Then in 1695 the Spanish adopted long lots with their resettlement around Santa Cruz, New Mexico. A discussion of the French and

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<sup>18</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," pp. 451-464.

their settlement patterns during the same era will follow and demonstrate that they were a potential source of knowledge for the Spanish. An analysis of the colonists who were in New Mexico during 1695 will provide evidence that the Spanish leaders were exposed to French influence. In addition, an early French connection of cultural significance which may be the source for long lots in San Antonio will be described in Texas. The story begins with one of the last conquistadors, Juan de Onate, and the first century of Spanish dominion in New Mexico.

## Chapter 2

### Settlement Patterns and Social Innovation in New Mexico during the Seventeenth Century

When Juan de Onate arrived in New Mexico in 1598, he found some 80,000 Pueblo Indians living in perhaps 80 villages in the upper Rio Grande Basin.<sup>19</sup> Onate awarded many of these villages to encomenderos who were the masters in a system of colonial administration that was a relic of feudalism. They cruelly exacted tribute from their charges, as Franciscan friars introduced their Roman Catholicism and attempted to change Pueblo culture. The Spanish lived among the Pueblos and off of their crops, but from 1598-1680 relatively few Spaniards did little by the way of farming and laying out their own agricultural settlements.

During the seventeenth century, the history of New Mexico is one of exploitation, warfare, and eventual reform. Initially, there were no long lots among either the Spanish or the Pueblo Indians. After 1693, the Spanish governor, Diego de Vargas, instituted a series of reforms which included the abandonment of the encomienda as a tool of Spanish colonial administration.

<sup>19</sup> Elinore M. Barrett, "The Geography of the Rio Grande Pueblos in the Seventeenth Century," *Ethnohistory*, Vol. 49, No. 2, 2002, pp. 138, 142-153. Hereafter cited as Barrett, "The Geography of the Rio Grande Pueblos in the Seventeenth Century." Ross Frank, "Demographic, Social, and Economic Change in New Mexico," in Robert H. Jackson, ed., *New Views of Borderlands History*, Albuquerque: University of New Mexico Press, 1998, p. 66. Hereafter cited as Frank, "Demographic, Social, and Economic Change in New Mexico."



Throughout the seventeenth century the Spanish crown attempted to eliminate the *encomienda*, but powerful *encomenderos* resisted and the system persisted elsewhere in the Spanish colonies. This highlights the reforms made by Vargas who faced pressure to reinstate the New Mexican *encomenderos*.<sup>20</sup> Innovation occurred with the end of the *encomienda* which yielded a new pattern of land use and the long lot during the 1690s.

### **Pueblos and Spaniards in the 1600s**

Traditionally, Pueblo villages were compact, permanent, and relied on a consistent source of water in order to survive in the arid environment. Their crops were grown in asymmetric fields that had to be irrigated by canals which conducted water to plots of land held in common by the villages. The Pueblos flooded their fields as opposed to watering them through plowed furrows. The *encomienda* system, common only within the present-day United States in New Mexico, drastically affected the Pueblos and their system of agriculture.

Agricultural economist David Weeks described this system designed to distribute vassals and power to would-be Spanish lords:

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<sup>20</sup> Weeks, "The Agrarian System of the Spanish Colonies," pp. 158-159, 167-168. Weeks points out how elements of the *encomienda* persisted in Central and South America into the Twentieth Century despite laws of the crown.

Of the medieval agrarian titles which were transplanted in the New World, only the *encomienda*, granted for a specific period of lives . . . continued to be important over a considerable space of time.

From the remnants of feudal and prefeudal times, and from lavish concessions and usurpations of land, later confirmed by prescription and by legislation . . ., there emerged a system of farming, an agrarian patronage, even embracing serfdom, of a type nobody knows how old.

Weeks continued:

The Spaniard, to subsist in the American colonies, could work the land himself, congregate Indians to farm under his direction, or could demand that the Indians supply him with food and other necessities from their own farming operations. Because of . . . Spanish tradition, and the existence of a conquered race that could be subjected to labor, the first alternative was at once eliminated.<sup>21</sup>

Onate instituted the system of exploitation upon arrival. In one example from 1598, which illustrates the heavy demands of the Spanish, Onate conscripted 1500 Pueblo laborers to build new irrigation works for the colonists.<sup>22</sup> At that time, the Spanish had well-established agrarian techniques already adapted to conditions in the New World and irrigation technology dating from the time of the Roman Empire. Little of the indigenous agriculture of New

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<sup>21</sup> Weeks, "The Agrarian System of the Spanish Colonies," p. 154.

<sup>22</sup> Glick, *The Old World Background of The Irrigation System of San Antonio, Texas*, pp. 3-4. Simmons, "Spanish Irrigation Practices in New Mexico," p. 135.

Mexico was new to them.<sup>23</sup> Both cultures grew corn and beans under irrigation in a dry environment. In contrast to the Pueblos, Spanish irrigation water flowed through furrows in irregularly shaped plots or those laid out geometrically, and their fields were owned and worked privately. Only the grazing land was held communally.<sup>24</sup> In Spain and New Spain, if long-lot fields existed at all, they were certainly uncommon. Jordan found no long-lot surveys throughout the irrigation districts of New Spain before 1731.<sup>25</sup>

During the early Spanish period, there was little reason for the Spanish to adopt Pueblo agricultural practices or import their own agricultural workers because they had no interest in developing their own farming villages within the *ecomienda* system. In general, the Spanish needed little of the Pueblo culture to be successful in their colonial endeavor. For sustenance, the Spanish continued exacting tribute from scarce Pueblo resources in the form of varying quantities of corn, other produce, or so many

<sup>23</sup> Ralph Twitchell, *The Leading Facts of New Mexican History*, Vol. 1, Cedar Rapids, Iowa: The Torch Press, 1911, p. 315. Hereafter cited as Twitchell, *The Leading Facts of New Mexican History*.

<sup>24</sup> Marc Simmons, "Spanish Irrigation Practices in New Mexico," *New Mexico Historical Review*, Vol. 47, No. 2, 1972, p. 135-136. Hereafter cited as Simmons, "Spanish Irrigation Practices in New Mexico." Thomas F. Glick, *The Old World Background of The Irrigation System of San Antonio, Texas*, El Paso: The University of Texas El Paso, Texas Western Press, 1972, pp. 22-26. Hereafter cited as Glick, *The Old World Background of The Irrigation System of San Antonio, Texas*. Weeks, "The Agrarian System of the Spanish Colonies," pp. 153-168.

<sup>25</sup> Jordan, "Antecedents of the Long-lot in Texas," p. 78. Jordan claimed that the long lots in San Antonio may have been unique.

pieces of woven cotton cloth called mantas. On the effects of the encomienda, geographer Elinore Barrett commented: “Spanish policies and practices that led to the disruption of subsistence activities substantially reduced the ability of Pueblo peoples to maintain themselves and their settlements.”<sup>26</sup>

Drastic changes occurred in Pueblo settlement patterns from 1598-1680.<sup>27</sup> The encomienda and associated brutality was but one cause. Population decline as a result of epidemic disease proved to be severe. The Pueblos lost about half of their total population during the first two decades of Spanish occupation.<sup>28</sup> Throughout the period, uprooted survivors were congregated by the Spanish in fewer than half the number of villages by 1680.<sup>29</sup>

Virtually all of the records from before 1680 were burned by the Pueblos when they revolted; however, evidence indicates that they were forced to live in their villages near irregularly shaped fields strung along the river valleys--with the ruling Spanish

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<sup>26</sup> Barrett, “The Geography of the Rio Grande Pueblos in the Seventeenth Century,” pp. 142, 151.

<sup>27</sup> Barrett, “The Geography of the Rio Grande Pueblos in the Seventeenth Century,” p. 138.

<sup>28</sup> Frank, “Demographic, Social, and Economic Change in New Mexico,” p. 66.

<sup>29</sup> Barrett, “The Geography of the Rio Grande Pueblos in the Seventeenth Century,” p. 153.

dispersed among the Indians.<sup>30</sup> Onate and subsequent governors did institute grants of private property to Pueblos and individual Indians. The nature of what the Spanish imposed is unknown, but in their domination they replaced aspects of indigenous communal land use. The Spanish compelled individual Pueblo Indians to accept responsibility over single plots because it prevented the Indians from migrating and also facilitated control of forced labor and tribute.<sup>31</sup> In addition to the demands of the soldiers and settlers present with the encomenderos, there were those of Franciscan missionaries. Both groups had literally moved in with the Pueblos. Cultural borrowing between the Spanish and Pueblo must have happened, but did not include long lots because neither possessed the system or needed it.

During the seventeenth century, the imposition of Spanish culture, military campaigns, famine caused by forced tribute and drought, and epidemic disease caused the Pueblo population to fall by about 70 to 80 percent to only 17,000 at the time they

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<sup>30</sup> S. D. Aberdale, *The Pueblo Indians of New Mexico Their Land, Economy, and Civil Organization*, American Anthropologist Association, Vol. 50, No. 4, Part 2, October, 1948, New York: Kraus Reprint Co., 1969, p. 7. Hereafter cited as Aberdale, *The Pueblo Indians of New Mexico Their Land, Economy, and Civil Organization*. Twitchell, *The Leading Facts of New Mexican History*, Vol. 3, p. 512-513.

<sup>31</sup> Twitchell, *The Spanish Archives of New Mexico*, Vol. 1, p. 460. Barrett, "The Geography of the Rio Grande Pueblos in the Seventeenth Century," p. 141. Aberdale, *The Pueblo Indians of New Mexico Their Land, Economy, and Civil Organization*, p. 7. Twitchell, *The Leading Facts of New Mexican History*, p. 512-513.

rebelled.<sup>32</sup> Spanish exploitation and cruelty along with the attempts of the Franciscans to Christianize, engendered feelings of hatred among Pueblo. In a rare moment of unity, they revolted in 1680, killing many Spaniards and driving the other refugees downstream to the El Paso area. Barrett points out, “With all of the disruption it is amazing that the Pueblos managed to throw off the yoke of Spanish rule.”<sup>33</sup>

### **Reconquest and Reform**

During December 1693, Vargas initiated the Reconquest of New Mexico and crushed the Santa Fe Pueblo Indians in a bloody battle. After a thirteen year absence, the first groups of Spanish settlers started to reoccupy the region. Following past practice, the Pueblos were brutally subjected. For two years, the Spanish exacted tributes of food and established few if any new agricultural plots around Santa Fe. Vargas soon understood that peace with the Pueblo Indians would require the Spanish to feed themselves; however, it took several years for land to be granted to the colonists who were largely from urban areas for the first agricultural settlement at Santa Cruz (Map 2.1).

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<sup>32</sup> Barrett, “The Geography of the Rio Grande Pueblos in the Seventeenth Century,” p. 142-153. Frank, “Demographic, Social, and Economic Change in New Mexico,” p. 66.

<sup>33</sup> Barrett, “The Geography of the Rio Grande Pueblos in the Seventeenth Century,” p. 153.

Map 2.1

New Mexico ca. 1700



Settlement patterns often persist, and there is a noticeable contrast between the fields in the the Pueblo grants issued in about 1689 and those Spanish plots of the upper Rio Grande granted after 1695.<sup>34</sup> Map 2.2 shows how irregular agricultural fields belonging to Pueblo Indians at Santa Clara and Pojoaque contrast with Spanish long lots in Santa Cruz. Similarly, irregular fields at San Juan, San Ildefonso, Nambe, and Tesuque Pueblos are surrounded by Spanish long lots.

After two years spent violently suppressing Pueblo resistance, Vargas sought peace in 1695 and reformed the way the Spanish colony functioned in New Mexico. In order to prevent exploitation, Vargas ordered the permanent separation of the Pueblos and Spanish.<sup>35</sup> He apparently tried to foster peace and stability by forcing the Spanish to become farmers--which proved to be difficult at first. The first settlers of Santa Cruz immediately petitioned for a return to practices reflecting the *encomienda* and requested that Vargas provide conscripted Indian servants. Commenting on their appeal when he reported his refusal, Vargas wrote: "they [the colonists] have not the energy and ability for the profitable cultivation of their cornfields for the reason that

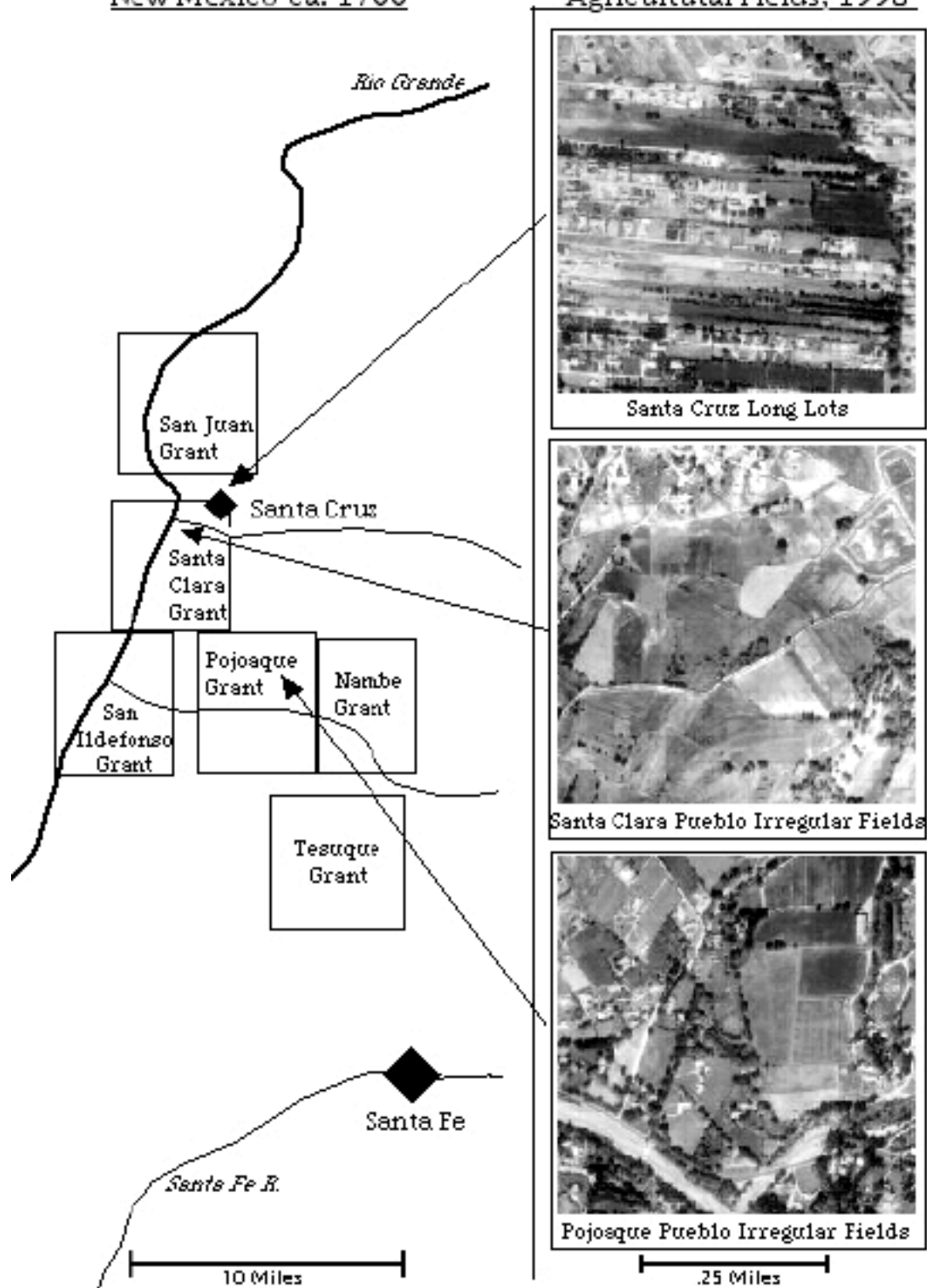
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<sup>34</sup> United States General Accounting Office, (U.S.G.A.O.). *Treaty of Guadalupe Hidalgo, Definition and List of Community Land Grants in New Mexico*, Washington, D.C.: U.S.G.A.O., 2001, p. 20.

<sup>35</sup> Twitchell, *The Leading Facts of New Mexican History*, p. 506.



Map 2.2 Pueblo Field Patterns and Spanish Long Lots  
New Mexico ca. 1700



Roth, Sources: Aberdale, 1948, 1969, USGS Terraserver, Microsoft, 1996, 2004

they were never brought up to do this kind of labor.”<sup>36</sup> The colonists were brought up to be urban merchants or administrators of fiefdoms, but Vargas forced them to adapt, and they became farmers. This reform brought about an end to the systematic abuse of the Pueblos.

After the Reconquest, a new method of agrarian land distribution and land use emerged in the upper Rio Grande valley. This system allowed Spanish families to own parcels without feudal obligations and intended that they be considered equally. When the Spanish reoccupied Santa Fe after 1693, they at first honored the old unregulated surveys in the vicinity of the villa.<sup>37</sup> Officials must have had the old model of land division in mind before they issued the first new land grants around the Villa of Santa Cruz in 1695. In addition, the plots of the Pueblos appear to have been irregularly shaped and laws regulating colonization failed to mention long lots. Land ordinances described holdings only in squares or rectangles; however, local officials wielded considerable authority over land surveys and distribution in New Mexico.<sup>38</sup> The

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<sup>36</sup> State Archives of New Mexico (SANM) I, Translations, Roll # 6, Archive 818, pp. 1-7. This is an exchange between Vargas and the colonists at Santa Cruz just over a year after they were given their own farms, November 26, 1696. It shows the inexperience and frustration of the farmers.

<sup>37</sup> J. J. Bowden [Jocelyn Jean Bowden], “Private Land Claims in the Southwest,” Two Parts, unpublished Masters of Law Thesis, Southern Methodist University, Dallas, Tx., 1969, Part 2, p. 270. Hereafter cited as Bowden, “Private Land Claims in the Southwest.”

<sup>38</sup> Jordan, “Antecedents of the Long-Lot in Texas,” p. 79.

following section makes a case for the first use of long lots in New Mexico following the Reconquest which appeared with the earliest new land grants to be issued for farms.

### **Spanish Documents and a New Date of Origin**

Deed records indicate that Spanish officials divided land and issued plots by width along acequias. The depth was less important and was left to be surveyed later when new fields were needed. Carlson affirms this method of division, and that it was used to measure long lots, when he wrote:

Land was measured generally by its width rather than its length, which was at least three times or more greater, resulting in a long-lot pattern.<sup>39</sup>

In 1695 at Santa Cruz, land was distributed in just this way at the first agricultural villa established by Vargas. Source materials strongly suggest that long lots were used there from the outset. With several groups of colonists moving from Mexico to Santa Fe, Vargas recognized the need for expansion and a new location for farms to support numerous settlers. Stream flow in the Santa Cruz Valley could support more colonists in contrast to the Santa Fe River which had limited capacity to sustain the new immigrants. Long lots appeared only later around Santa Fe because it had been

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<sup>39</sup> Carlson, "Long Lots in the Rio Arriba," p. 50.

reoccupied by pre-1680 residents who initially reclaimed their old fields laid out in irregular patterns.

Vargas needed the new arrivals to occupy farm land and begin agricultural production to satisfy the needs of the colony without burdening the Pueblos for tribute. He determined that this would be best accomplished around Santa Cruz, which became the first significant Spanish agricultural settlement in New Mexico.

In 1695 Vargas wrote:

I order and I leave orders with my lieutenant-governor and captain-general that the separate lands of the district and limits of said Villa de Santa Cruz, the settlers having been assembled and it having been ascertained which of them received and have been favored with grants of the tracts and ranches already surveyed, to those to whom such grants have not been made the said separate lands shall be given, marking off for each settler and his family that which may be found to be sufficient for the planting of one-half fanega of maize . . . .<sup>40</sup>

These plots of land in Santa Cruz had been carefully determined before being granted in a new way. Vargas ordered Luis Granillo to apportion the lands equally to the new settlers. J. J. Bowden, whose scholarly examination of land grants in Spanish New Mexico is well known, reported that these farms were “individual strips of

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<sup>40</sup> Ralph Twitchell, “Settlement, 1695,” SANM I, Translations, Roll #7, Archive #882, ca. 1914, p. 25. Hereafter cited as Twitchell, “Settlement, 1695,” SANM I, Translations, Roll #7, Archive #882. See also Jessie Bromilow Bailey, *Diego Vargas and the Reconquest of New Mexico*, Albuquerque, UNM Press, 1940. Hereafter cited as Bailey, *Diego Vargas and the Reconquest of New Mexico*. Vargas, Kessel, *Vargas Papers*, Vol. 4, Book 1, pp. 603-637.

land” on irrigation works already.<sup>41</sup> Little is known about the canals constructed by the Pueblo Indians.

In 1695 Vargas described the grant:

I [Vargas] give them all with appreciable improvements, since I have given them cleared lands of known fertility, with their drains and irrigating ditches and dams in good condition and with irrigation secured, and also new houses, because the said pueblo is new, and they have nothing to do but to go and live in them and make use of the lands which I will designate for them, granting ranches and farms to those who prefer the same, in order to allow them more room and allow for other settlers . . .<sup>42</sup>

Vargas, or more likely his subordinates, granted land in largely the same way to several groups of colonists who settled in Santa Cruz between 1695 and 1699. Each time, an official took the grantees by the hand and measured the width of the plot by walking along a lane or frontage of an irrigation ditch.

Original grantees subsequently bought and sold their holdings. Diego Gonzales, a member of the militia, received a plot in 1698 which he later sold.<sup>43</sup> The deed of sale records the width and indicates it was likely an early long lot. It reads in part:

Know ye all [illegible] this deed of royal sale . . .  
[for] a piece of land which is situated in the upper

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<sup>41</sup>Bowden, “Private Land Claims in the Southwest.” part 2, p. 574.

<sup>42</sup> Twitchell, “Settlement, 1695,” SANM I, Translations, Roll #7, Archive #882, p. 20.

<sup>43</sup> Angelico Chavez, *Origins of New Mexico Families*, Santa Fe, New Mexico: Museum of New Mexico Press, 1954, 1992 p. 190. Hereafter cited as Chavez, *Origins of New Mexico Families*.

Canada of La Villa Nueva Santa Cruz, which land was obtained through legitimate inheritance from our deceased father, Diego Gonsales, [reference Chavez, Twitchell and Kessel for more information on Gonsales] who acquired it through deed of grant, documents for which were executed in his favor.

[The aforesaid piece of land] . . . contains two hundred Castilian varas in width, and is bounded on the east by lands of our brother, Diego Gonsales; on the west by land assigned to our father by [illegible] de Vargas, for our brothers by second marriage; and on the south by the high woodless hills; on the north by the Rio de la Canada.”<sup>44</sup>

Another deed record describes a grant to Matias Madrid, a presidial soldier who arrived with the Farfan-Velasco colonists in 1694 and received his own land when initially distributed.<sup>45</sup> The relevant portion of the deed reads in part:

In this villa of Santa Cruz. . .[in 1751], before me, [illegible], Alcalde Mayor and Captain of War of said Villa; appeared before me [illegible]who said that she [sold] . . . to Joseph Esqibel, a house lot in said Villa . . . that by marital inheritance she received from her husband Matias Madrid. . . [said land several hundred varas from the church on the mother ditch] in width it contains eighty varas . . . .”<sup>46</sup>

Importantly, no further boundary descriptions were given. Many deed records had similar simple boundary descriptions indicating precise widths and vague depths. As Carlson and Bowden suggest, lands divided by width were probably long lots.

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<sup>44</sup> SANM Translations, Roll #6, Archive 817-820.

<sup>45</sup> Vargas, Kessel, ed., *Vargas Papers*, Vol. IV, Book 2, pp. 1161, 1176.

<sup>46</sup> SANM Translations, Roll # 3, Archive 262, p. 1.

Thus, available evidence shows that long lots first appeared in New Mexico, not as previously believed during the 1750s, but in the 1690s. In addition, they were decades before the 1731 long lots once believed to be “unique” in all the Spanish colonies. The long-lot surveys in New Mexico, utilized much earlier than Jordan and Carlson thought, represent both social innovation by the Spanish as well as an advancement in technical surveying and scientific use of the land.

Long lots provide an example of the breakdown of Spanish frontier feudalism. The encomienda was dead and replaced by the systematic endeavor to place masses on their own individual plots of land. They were mostly urban people from the lower classes and others with mixed new and old world blood. There would be one farm for one family, and it was sized to meet the owners needs rather than feudal obligations. The Spanish then learned to survive as independent farmers drawing on their own traditions and assimilating knowledge of the Pueblo Indians. The innovation represented by the long lot system seemingly mirrored advancements within the scientific and agricultural revolution occurring in Europe during that period and foreshadowed changes to come in the Age of Enlightenment which included the rights of the common man to hold property without service to a master.

Two Frenchmen, Archibeque and Gurule, served the Spanish in the Reconquest between December 1693 and the time of the occupation of Santa Cruz when long lots were adopted in 1695. In contrast to most of the other colonists, Archibeque and Gurule had already been exposed to thought currents forcing change in Europe and were present at the same time transformation was occurring in New Mexico. Who caused the Spanish to adopt the long lot? That there was a long-lot precedent among the Pueblos can be ruled out. That the Spanish brought long lots as a part of their cultural baggage can also be excluded. That long lots diffused with Frenchmen, on the other hand, seems more likely. What did Archibeque and Gurule know and introduce to New Mexico? Could they have been the source? Documents and historical accounts fail to answer this question definitely, so a solution necessitates an understanding of what similar people did when they established French colonies in North America.



## Chapter 3

### French Long Lots in North America

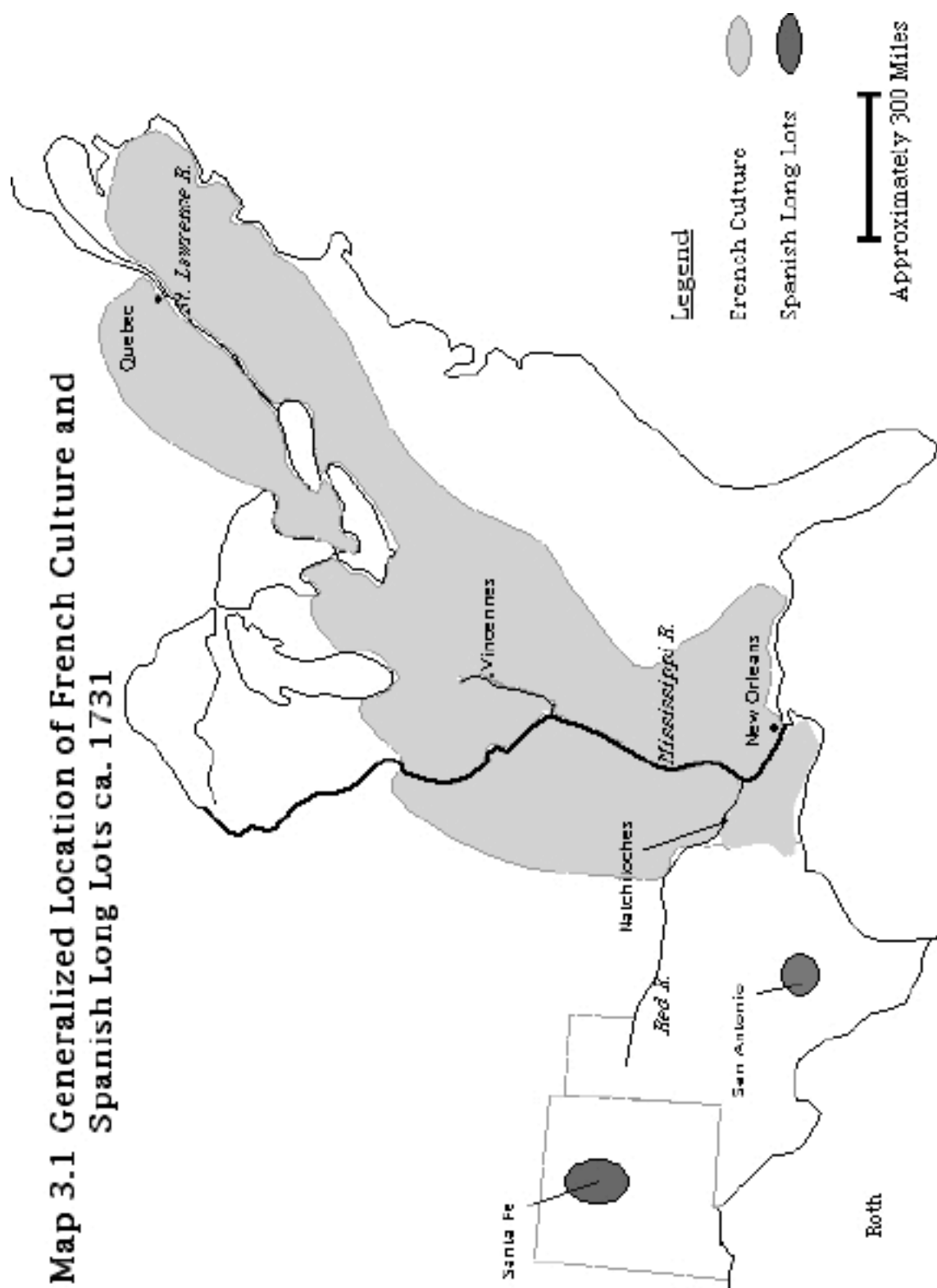
The population of France grew dramatically during the sixteenth and seventeenth centuries. Larger numbers of people presented a need for more land, including previously unclaimed land. In response, government officials started a process of lowland reclamation in the coastal and riverine areas of western France. In the moors, marshes, and lowlands, where ecologically possible, officials distributed land in groups of long lots. When Frenchmen eventually left France on colonizing expeditions, they took with them their agricultural techniques, including the long lot. French people impressed the long-lot landscape almost everywhere they settled in North America. Moreover, Frenchmen apparently shared what they knew wherever they formed alliances in the New World.<sup>47</sup> This chapter describes the French use of long lots in North America--the likely source for long lots in Texas and New Mexico (Map 3.1).

In the their colonial effort in North America, Frenchmen widely affected the New World. Even the failed La Salle expedition resulted in the spread of French knowledge during the 1680s.

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<sup>47</sup> Jordan, "Antecedents of the Long-lot in Texas," pp. 80-81. Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," pp. 451-464.

**Map 3.1 Generalized Location of French Culture and Spanish Long Lots ca. 1731**



Regarding the more successful Samuel de Champlain, one of the earliest influential Frenchmen, Butzer wrote:

The fact that Champlain was born in the marshlands of western France supports the notion that he introduced some form of estuarine drainage [when developing colonial agriculture]. . . . He came from Brouage, in his day a seaport 35 km south of La Rochelle, and situated on the major dike (now followed by the highway) that once separated the salt pans of the Marais de Brouage from the open sea.<sup>48</sup>

Long lots were very much a part of this. In all likelihood, familiarity with marshland type reclamation utilizing long lots would have been common among people from other French coastal areas.<sup>49</sup> Describing another early colonist, Charles d' Aulnay, Butzer wrote:

Against this background of potential information appears the dramatic contemporary account of the active role of Charles d'Aulnay, the founder of the permanent colony at Port Royal. It places him as a surveyor, with the basic tools of that profession, measuring out the site of the new dike, rather than as an overseer directing a group of settlers. D'Aulnay did not come from a marsh area, but as a naval officer he had spent years in military actions along the marsh coasts around La Rochelle, and he would be expected to know survey instrumentation. D'Aulnay would appear to have been the catalyst in turning the colonists toward reclamation.<sup>50</sup>

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<sup>48</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 454.

<sup>49</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 464.

<sup>50</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 464.

D'Aulnay, and similar people who followed him in other places, divided and distributed agricultural land in long lots when ecologically possible.<sup>51</sup> The long lot was an integral part of French cultural baggage which many carried to the New World.<sup>52</sup>

Frenchmen formed communities using long lots and long lots guided the way they interacted with neighbors. People of similar background, educated in coastal areas, as well as naval officers of varying description, traveled widely with expeditions through North America, carrying with them elements of their intellectual culture, including long lots.

In his descriptions of individuals who influenced settlement in Canada, Butzer alludes to a more universal theme when he wrote:

It is therefore possible to reexamine conventional understanding of agrotechnology transfer from France to Atlantic Canada, and to do so in an intellectual framework that does not underestimate the originality of French contributions to the North America "frontier" experience.<sup>53</sup>

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<sup>51</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 464.

<sup>52</sup> Roderick Peattie, "Farms and Farming in the Lower St. Lawrence Valley," *Journal of Geography*, Vol. 21, No. 5, 1922, pp. 174-179. John Fraser Hart "Field Patterns in Indiana," *Geographical Review*, Vol. 58, No. 3 1968, pp. 456, 464. Hereafter cited as Hart "Field Patterns in Indiana." Walter M. Kollmorgen and Robert W. Harrison, "French Speaking Farmers of Southern Louisiana," *Economic Geography*, Vol. 22, No. 3, 1946, pp. 153, 156. Hereafter cited as Kollmorgen and Harrison, "French Speaking Farmers of Southern Louisiana. Jordan, "Antecedents of the Long-lot in Texas," p. 81. Harris, *The Seigneurial System in Early Canada*, pp. 119-121.

<sup>53</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 452.

Butzer showed how the long lot became etched on the Acadian landscape as a part of French agrotechnology transfer. He writes tellingly of D'Aulnay: "It is difficult to avoid a sense that the initial technology transfer to Acadia was largely driven by one person."<sup>54</sup> The heavy influence of individual Frenchmen during initial settlement occurred in other regions. As noted below, a number of geographers recognized the long lot as a part of an early French connection.

In each case of long lot introduction, one person or a small group of leaders seemingly instituted the use of ribbon-shaped units of land, divided into varying dimensions, that stretched away from a road or a water feature. Soon, the long lot was found commonly in New France. In each place, it was associated with influential local officials and dated from the time of initial colonization.<sup>55</sup> Cole Harris and John Warkentin described the first long lots in Canada near Quebec and how they spread after the 1630s:

Long lots appeared in Louisiana, in Wisconsin, at Vincennes in Illinois, around Fort Detroit, along the Red River, and in several other places where the seigneurial system was never introduced. In Canada the king's ministers and some seigneurs opposed the long-lot

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<sup>54</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 465.

<sup>55</sup> Jordan, "Antecedents of the Long-lot in Texas," pp. 80-81. Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," pp. 451-464. Harris and Warkentin, *Canada before Confederation*, pp. 39-41.

system for several years and never standardized it by official edict. The long lot appears, then, less as an imposition from above than as the preference of the settlers. Possibly this preference was a direct European inheritance. . . . Some of the settlers in Canada may have come from a part of France where this settlement pattern had survived. More striking, however, is the similarity between conditions in seventeenth-century Canada and in much of northwestern France [where long lots were utilized] five centuries before. Both were pioneer areas where land was being cleared and settled, where a single line of transportation--whether river or road--provided the connection with the outside world, and where individual settlers were not entirely free to select and to demarcate their own agricultural land.<sup>56</sup>

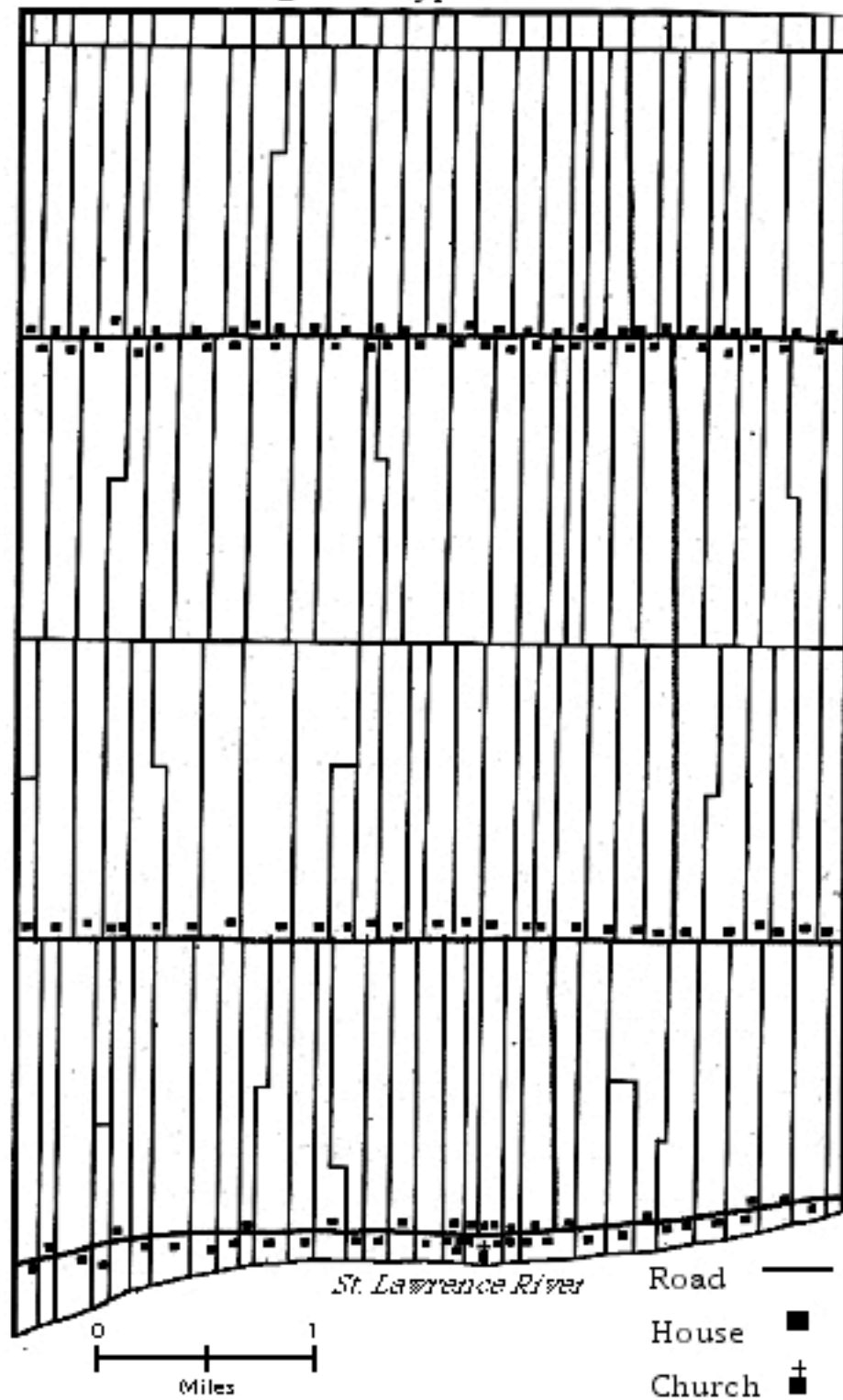
Apparently guided by cultural experience, long lot surveys formed a common landscape pattern when instituted by leaders in French colonial efforts from Quebec to the Great Lakes and through much of the Mississippi River basin (Map 3.2). That Frenchmen introduced the idea of long lots seems clear; that they influenced other colonial regions seems reasonable. Noting historical roles of the individual, and how easily information about them can be lost or distorted, Butzer wrote:

It is easy to underestimate the potential role of individuals in envisioning the possibilities or enabling the processes of information diffusion. Were such

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<sup>56</sup> Harris and Warkentin, *Canada before Confederation*, pp. 39-40.

Map 3.2 "Long-Lot Settlement Pattern in  
Quebec Hypothetical Model"



Source: Harris and Warkenstein, *Canada Before Confederation*, p. 70

individuals prominent or anonymous? Will not the role of anonymous agents, however critical it may have been, be subsumed under the designation of “spontaneous diffusion?”<sup>57</sup>

John Fraser Hart studied Vincennes, Indiana, another community of French origin. He described the land claims as being on long lots measuring about two arpents wide by forty arpents deep.<sup>58</sup> An arpent, as noted, was about 192 feet.<sup>59</sup> Hart found the typical settlement pattern to have bands of long-lot fields stretching away from a central village.<sup>60</sup> He writes: “Furthermore, the ground investigation indicated that farmers, like their fellow human beings, are creatures of habit, and the layout of their fields does not change much from year to year.”<sup>61</sup> Such comments call into question the likelihood of independent invention and innovation in agricultural technology without outside influences.

The French routinely built linear villages with houses fronting their owner’s long lots. Geographers Walter Kollmorgen and Robert Harrison described French settlement patterns in Louisiana.

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<sup>57</sup> Butzer, “French Wetland Agriculture in Atlantic Canada and Its European Roots,” p. 465.

<sup>58</sup> Hart “Field Patterns in Indiana,” p. 456.

<sup>59</sup> Richard Colebrook Harris, *The Seigneurial System in Early Canada: A Geographical Study*, Madison: University of Wisconsin Press, 1966, p. x. Hereafter cited as Harris, *The Seigneurial System in Early Canada*.

<sup>60</sup> Hart “Field Patterns in Indiana,” p. 456.

<sup>61</sup> Hart “Field Patterns in Indiana,” p. 464.



Kollmorgen and Harrison noted:

. . . there are numerous interesting facets to the lives and folkways of the French-speaking people of Louisiana. Prominent among these are the line form of settlements. . . [and] a rather intimate and stable community life. . .<sup>62</sup>

They continued:

While line settlements are well adapted to the natural levees of southern Louisiana this mode of settlement was also adopted by French settlements in Canada and the Great Lakes region. This form of settlement is therefore a cultural phenomenon as well as a geographic adaptation to the land forms prevailing in the bayou country of Louisiana. Like the French language and Catholic religion, line settlements and the complex and intimate social life which they engender, have become an integral part of the culture of French Louisiana.<sup>63</sup>

Importantly, Kollmorgen and Harrison identified this type of village pattern associated with long lots as a “cultural phenomenon,” and noted how the pattern was adaptable to different ecological circumstances. As French populations grew in places, they noted “a pyramiding of people on available local lands,” rather than migrating to new regions.<sup>64</sup> They claimed that when the French did occupy new land, they divided it into long lots.

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<sup>62</sup> Kollmorgen and Harrison, “French Speaking Farmers of Southern Louisiana,” p. 153.

<sup>63</sup> Kollmorgen and Harrison, “French Speaking Farmers of Southern Louisiana,” p. 153.

<sup>64</sup> Kollmorgen and Harrison, “French Speaking Farmers of Southern Louisiana.”, pp. 153, 156.

Thus, where the French colonized, they readily transferred their agrotechnology to the landscape. My point is that Frenchmen were certainly capable of taking practical, ecological techniques and applying them to northern Spanish colonies when they entered .

The long lot as used by the French engendered cultural stability, allowed equitable access to natural resources, eased alienation of land in a colonial setting, and through subdivision accommodated equal inheritance among heirs.<sup>65</sup> It is interesting to observe that both Jordan and Carlson found these to be among the broad reasons for the long lot's adoption in New Mexico and Texas (Map 3.3). As noted, Frenchmen were present within the regions highlighted in Map 3.3, and they possessed specific knowledge and skills associated with long lots.

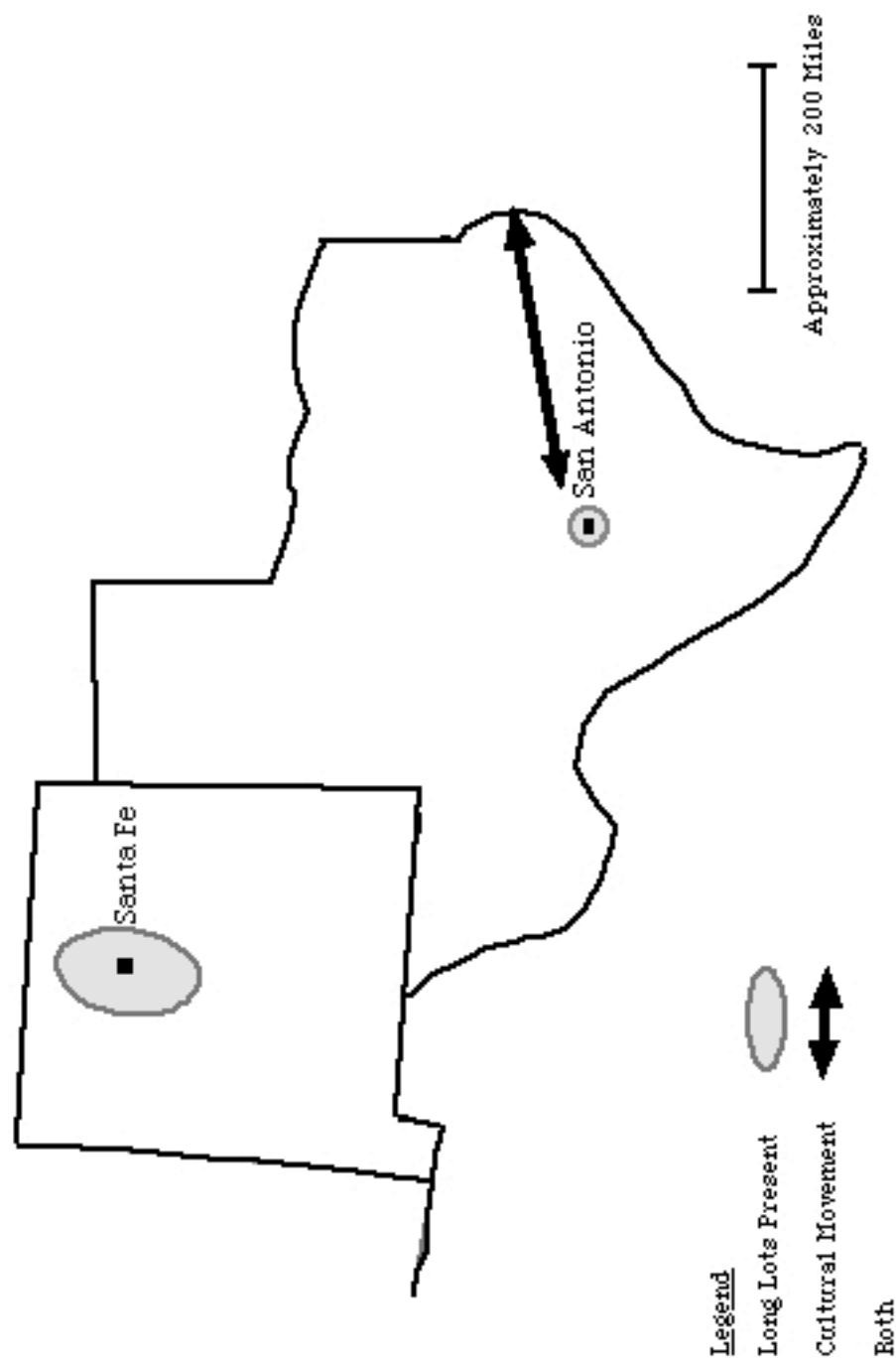
### **The Context for a French-Spanish Connection**

No matter the nationality of the user, long lots were a useful and valuable method of dividing land in a colonial setting. The system allowed equitable access to what Frenchmen and Spaniards needed: transportation and, for the Spanish, irrigation water in a dry environment. They were ecological, easy for colonists to use, and because neighbors were in close proximity long lots benefitted those who lived on them socially. Life on the American frontier

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<sup>65</sup> Harris, *Historical Atlas of Canada*, p. 115.

**Map 3.3      Generalized Location of Long Lots in Texas and  
New Mexico ca. 1731**



required adaptation for survival, and the French had a range of experiences valuable in that setting. Because frontiersmen were so far away from central control, specialized skills and knowledge were shared. When the Spanish and French met in Texas and New Mexico, each learned all they could from the other. In the New World, the Spanish and French often joined efforts despite official Old World rivalries and sanctions that prohibited this.

Because contact was illicit, cooperative efforts in North America were seldom recorded and were omitted in official documents. However, some historical materials remain to show clear opportunities for diffusion of long lots from known French sources to the Spanish beginning in the 1690s. Indeed, the Spanish accepted some Frenchmen because they had knowledge necessary for survival; certainly, the reverse occurred as well.

In the earliest settled places in Texas and much of northern New Mexico, the long lot seems to illustrate on the land a Spanish connection with the French, and an adoption of at least one aspect of French agrotechnology. As Butzer described the process, the colonial era unfolded and cultural elements were accepted or rejected, recombined or transformed in a way descriptive of historical processes.<sup>66</sup> I am addressing here the likely historical

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<sup>66</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 451.

process of long lots diffusing from the French to Spanish through contacts previously ignored by Jordan and Carlson. Suspicions based on European rivalries were often tempered by a need for cooperation. Sustained contact between the French and Spanish in North America resulted. In these exchanges, long lots likely diffused.

### **Diffusion and Independent Invention in Historical Context**

In his work on the Canary Islanders and their colonization of San Antonio, historian Thomas F. Glick gave what I believe to be the primary reason why the Spanish never invented long lots independently in New Mexico and Texas: “Agricultural practice is extremely conservative.”<sup>67</sup> Glick described the introduction of Canarian agricultural and cultural institutions to San Antonio. Canary Islanders and the Spanish in general apparently never used long lots. They used metes and bounds or squares and rectangles in their land grants. It took someone like a D’Aulnay or Champlain to introduce long lots in New France. Likewise, someone with a probable French connection prompted the Spanish to adopt long lots in New Mexico and Texas. Otherwise, Spaniards would have

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<sup>67</sup> Glick, *The Old World Background of the Irrigation System of San Antonio, Texas*, p. 31.

instinctively used traditional divisions of land, not the ordered long-lot pattern.

After describing cultural diffusion associated with Canarian government institutions that dated from the Middle Ages to San Antonio, Glick alluded to the resistance to change and the difficulty of independent invention in the following example:

The [Canarian] peasant cultivators could anticipate an average of only two good years each decade, two or three [years each decade] which were passable, and the rest completely sterile. Three or more bad years in a row ended in generalized famine, followed by emigration. The famine of 1721-23 (doubtless the direct precipitating factor in the departure of the San Antonio settlers) was the worst yet recorded. It began in 1721 with a desolating hurricane; crops were ruined and the peasants began to die of starvation. In March of that year the cabildo of Gran Canaria had to ban further immigration . . . so great was the migratory pressure. In October 1722, more hurricanes ravaged the desert island destroying what few crops were still standing. There was no let-up as drought continued for the rest of the decade. . . . From 1726 to 1729 many people from the interior of the island crowded into the capital . . . living in wretched hovels and hoping to be allowed to leave. Finally, on September 1, 1730. . . a series of devastating volcanic eruptions began which by 1736 had covered a third of the island's surface with volcanic ash.<sup>68</sup>

Even in the face of such severe ecological constraints, Canary Islanders remained culturally bound to feudal agricultural

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<sup>68</sup> Glick, "The Old World Background of the Irrigation System of San Antonio, Texas," pp. 28-29, 53.

institutions from Spain, and with futile efforts they grew cereals and raised livestock. Surrounded by the Atlantic Ocean, they seemed to ignore potential offered by the ocean, and even in the face of crop failure innovation was slow to occur. As Glick observed: “Interestingly, it did not occur to these peasants to fish for a living until the nineteenth century.”<sup>69</sup>

In New Mexico and Texas, where vacant agricultural lands were being settled by inexperienced farmers, a suggestion from an influential person quite likely affected change. It would have taken such a cue to make the Spanish change because, like most all people, they were tied to tradition. In fact, the Spanish in Santa Cruz left evidence proving they did not want innovation when they pleaded for a return to the *encomienda* and use of Indian farm labor. Warfare between Spaniards and Indians prompted Vargas to abandon the *encomienda*. Vargas must have been open to new ideas as he contemplated the need for change.

## Summary

When considering French settlement in Vincennes and other places in the East, it is difficult to ignore the similarities between what the French built and Spanish long-lot settlements in New

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<sup>69</sup> Glick, “The Old World Background of the Irrigation System of San Antonio, Texas,” p. 28.

Mexico and Texas. Village development followed a form similar to one described as peculiar to the French, with a central village, located on the first tier above a flood plain, roads stretching from the core, and clusters of long-lot fields laid out along watercourses.<sup>70</sup> Individual long lots in New France, Texas, and New Mexico, were similar. Real differences are found in canals, dams, and dikes draining fields in French wetlands rather than the irrigation dams and ditches flooding them in New Mexico and Texas. Importantly, both draining and irrigating fields required similar technology.

Colonial promoter, Robert Cavalier Sieur de La Salle, facilitated the introduction of French agrotechnology into New Spain during the 1680s. His imperial and economic goals failed, yet he introduced new material and intellectual culture to the Spanish through the expedition's survivors. All the while, the French intended to continue colonizing new territory and dividing it into long-lot fields and line settlements which had proven to be remarkably stable.<sup>71</sup> In fact, La Salle had already settled such a village in the Great Lakes region before landing in Texas.<sup>72</sup> The

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<sup>70</sup> R. Louis Gentilcore "Vincennes and French Settlement in the Old Northwest," *Annals of the Association of American Geographers*, Vol. 47, No. 3, 1957, pp. 285, 287-88, 293.

<sup>71</sup> Kollmorgen and Harrison, "French Speaking Farmers of Southern Louisiana." pp. 153, 156.

<sup>72</sup> Francis Parkman, *La Salle and the Discovery of the Great West*, Williamston, Massachusetts: Corner House Publishers, 1897, 1968, pp. 12-15.



story of La Salle's expedition to Texas yields the first clues in identifying important Frenchmen, and how long lots became a part of the landscape in New Mexico and Texas.

To recap, the Spanish adopted French-style long lots in only two limited regions in New Mexico and Texas separated by a great distance along the colonial frontier. Located at the fringes of imperial influence, these places experienced interaction between Europeans with different agricultural traditions. The exchanges they had seemingly affected settlement patterns.<sup>73</sup> Alone, the similarity of the line settlements in New Mexico and New France indicates a probability of a French connection of cultural importance. Yet, historical evidence reveals other early French influence, and the ideas of independent Spanish invention begin to yield to the reality of what well-educated ambitious Frenchmen probably did in New Mexico beginning in the 1690s. Any question of Spanish independent invention based on informed observations of local ecology shrinks in importance when considered in light of what Frenchmen in all likelihood contributed in Santa Fe beginning in the late seventeenth century. To date, while inadequately documented in a way which determines absolute causality, a deeper historical context reveals more substantial French influence on the Spanish frontier. Frenchmen made there way to New

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<sup>73</sup> Harris and Warkentin, *Canada before Confederation*, p 62.

Mexico, but how influential were they and could they have influenced settlement patterns?

## **Chapter 4**

### **La Salle's Final Expedition and the Spanish Connection after the 1680s**

La Salle and his expedition are central to the argument that the French were the source for Spanish long lots. The explorer left Fort Miami on Lake Huron in December 1682 and reached the mouth of the Mississippi River in April 1683. He claimed all the waters drained by the Mississippi for Louis XIV and France. After reaching the Gulf, La Salle returned to France and formed a group to establish a self-sustaining colony at the mouth of the Mississippi.

Meanwhile, Spain learned of La Salle's claim for France, and this prompted the Spanish exploration and colonization of Texas. French and Spanish competition for Texas set into motion events that cause cultural exchange. As had others in Acadia and Quebec, La Salle's crew carried French material and intellectual culture to Texas. The survivors of this epic story were positioned to affect colonial settlement patterns in New Mexico after the Reconquest of the 1690s. This chapter follows the first Frenchmen who survived in Texas.

#### **Frenchmen and the Tejas Indians**

La Salle's expedition sailed from France on July 24, 1684.

From the beginning, La Salle proved to be an incompetent leader.<sup>74</sup> On his return trip he failed to find the mouth of the Mississippi River and sailed beyond it in the Gulf of Mexico, wrecking his ships along the coast of the relatively barren Matagorda Bay in Texas. After two years of floundering and men dying, morale was low and conspiracies were high. In 1687, La Salle was assassinated. Of about 180 people who originally landed in Texas, Joutel, an expedition chronicler, counted only fifteen survivors. The Spanish priest, Manzanet, recorded eighteen. Several survivors, including Joutel, returned to Canada. Others went to live with the Tejas Indians, and they had extraordinary lives.<sup>75</sup>

Frenchmen Jean L'Archeveque, Pierre Meusnier, Jacques Grollet, (in Spanish Juan Archibeque, Pedro Meusnier, and Santiago Gurule) stayed in Texas with the Tejas. They had little hope of

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<sup>74</sup> Francis Parkman, *La Salle and the Discovery of the Great West*, Williamston, Massachusetts: Corner House Publishers, 1897, 1968, p. 361. Hereafter cited as Parkman, *La Salle and the Discovery of the Great West*. Commenting on La Salle, one of the ship captains said, "There are very few people who do not think his brain is touched."

<sup>75</sup> Parkman, *La Salle and the Discovery of the Great West*. Parkman proved most useful in understanding the expedition. There are several other accounts of this expedition which offer little benefit over the account penned by noted historian Parkman. The journal of Henri Joutel informed much of Parkman's work. Henri Joutel, *The La Salle Expedition to Texas; The Journal of Henri Joutel, 1684-1687*, edited by William C. Foster, translated by Johanna S. Warren, Austin: Texas State Historical Association, 1998. Hereafter cited as Joutel, *The La Salle Expedition to Texas; The Journal of Henri Joutel*. The independent scholar, William C. Foster, supervised the translation of this journal which is helpful in understanding La Salle and his men in Texas. Another account also proves helpful: Henri Joutel, *A Journal of La Salle's Last Voyage*, New York, Corinth Books, 1962, pp. 104-128.

returning to France or of finding another European colony.<sup>76</sup>

Meusnier, the son of a French government official, did eventually reach New Mexico, but then disappears from the historical record.

Archibeque was from Bayonne, a town near the Atlantic Ocean along the lower Adour River. He was probably born on December 24, 1665 and would have been about eighteen when recruited by La Salle. Archibeque was probably the most influential of the three. He was well educated and from a upper class family in the lowlands of Western France.<sup>77</sup> Archibeque's complete story may never be fully known: if records do come to light, the books that he read, the subjects that he studied during his education, and his experiences in France will surely enlighten this topic.

From La Rochelle, a coastal city in the freshwater marshes of western coastal France, Gurule was one of La Salle's naval officers.<sup>78</sup>

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<sup>76</sup> Kathleen Gilmore, "Treachery and Tragedy in the Texas Wilderness," *Bulletin of the Texas Archeological Society*, Vol. 69, 1998, p. 43.

<sup>77</sup> Esquibel and Colligan, *The Spanish Recolonization of New Mexico*, p. 53. Robert S. Weddle, editor, *Three Primary Documents; La Salle, the Mississippi, and the Gulf*, College Station, Texas: Texas A&M University Press, 1987, p. 240. Some confusion about Archebeque's age appears in the literature. The discrepancy appears in Weddle's work. Genealogists with convincing evidence have shown his birthday to be December 24, 1665. The confusion arises because Archibeque claims to be younger after reaching New Mexico. The genealogists should be trusted in this case. Archibeque apparently forgot his age or lied about it in Spanish documents indicating his year of birth as 1671. The genealogists traced birth records of the family in France and found 1665 to be the likely year of birth.

<sup>78</sup> In order to avoid confusion for the reader, each of these Frenchmen will be referred to using spellings for their names adopted after they joined the Spanish unless the reference is from a quoted source. In this case the quote is related as written.

He was born in about 1664 and was probably a year older than Archibeque. Gurule was an experienced sailor by the time he joined the final La Salle expedition. Apparently, Gurule accompanied La Salle on his early expeditions around the Great Lakes and Mississippi River before going to Texas.<sup>79</sup> After being stranded there by La Salle, Gurule deserted the French and joined the Tejas for five years. He married a Tejas woman. Archibeque found Gurule a short while later.

After joining the Tejas, evidence suggests that Archibeque and Gurule made considerable efforts to adapt to their new circumstances. The Frenchmen absorbed the Tejas culture in unknowable ways; however, their assimilation is noted by the tattoos they accepted. Archibeque and Gurule allowed the Tejas to tattoo their bodies from the waist up--including the face. Such tattooing represented a substantial commitment to the Tejas community, and it suggests that they perceived their situation to be permanent.<sup>80</sup>

The Frenchmen faced numerous cultural barriers and obstacles. In order to survive, they had to communicate, and to do so they probably learned both the Tejas language and sign

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<sup>79</sup> Esquibel, "The Spanish Recolonization of New Mexico," p. 54.

<sup>80</sup> Herbert Eugene Bolton, *Spanish Exploration in the Southwest 1542-1706*, New York: Barnes and Noble, 1952 p. 363. Hereafter cited as Bolton, *Spanish Exploration in the Southwest 1542-1706*.

language. The Tejas and other North American tribes used sign language to facilitate communicating between cultures across the continent.<sup>81</sup> Another French survivor captured by the Spanish was documented to know several local dialects.<sup>82</sup> Later, when Archibeque was included on Spanish expeditions in New Mexico, one of his roles was as interpreter. Archibeque and the others must have recognized that providing service for their hosts and learning aspects of their culture was a means to survive.

When they learned that Spaniards were near Matagorda Bay, Archibeque somehow contacted the Spanish through the Tejas. He wrote two letters and painted a ship, which he had delivered to the Spanish by Tejas messenger. Gurule attached a brief addendum to one of Archibeque's letter. Archibeque wrote the following:

Sir  
I do not know what sort of people you are  
We are French we are among  
the savages we would like much to be  
Among the Christians such as we are  
We know well that you are Spaniards  
We do not know whether you will attack us  
. . . we are sorely grieved to be among  
the beasts like these who believe neither in God  
nor in anything. Gentlemen if you are willing to  
take us away

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<sup>81</sup> William C. Foster, *Spanish Expeditions into Texas 1689-1768*, Austin: University of Texas Press, 1995, pp. 104, 208-209, 230. See also W. P. Clark, *The Indian Sign Language*, Lincoln and London: University of Nebraska Press, 1982, and William Tomkins, *Indian Sign Language*, New York: Dover Publications, 1969

<sup>82</sup> Foster, *Spanish Expeditions into Texas*, pp. 23-24.

you have  
only to send a message as we have but  
little or nothing to do as soon as we see the note  
we will deliver ourselves up to you.  
Sir  
I am  
Your very humble  
and very obedient  
Servant  
Jean L Archeveque of Bayone<sup>83</sup>

Captain Alonso de Leon, the leader of the Spanish expedition seeking La Salle, received the letter from the messengers. The Tejas arranged a meeting between the Spanish and the surviving Frenchmen. Translations of Spanish documents by Lilia Casis offer a description of the contact. Don Damian Manzanet, a member of the Spanish expedition, recorded the French arrival at the Spanish camp on May 2, 1689:

Two Frenchmen came, naked except for an antelope's skin, and with their faces breasts, and arms painted like the Indians, and with them came the governor of the Tejas and eight of his Indians.<sup>84</sup>

The fact that the Tejas governor attended the departure of

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<sup>83</sup> Esquibel and Colligan, *The Spanish Recolonization of New Mexico*, pp. 58-59. See also Charles Wilson Hacket, ed, *Historical Documents Relating to New Mexico, Nueva Vizcaya, and Approaches thereto, to 1773*, Vol. 2, pp. 471-472. Hacket describes Archibeque's letter to the Spanish written when he was living with the Indians as well as a description of a stunning painting of a ship performed by Archibeque when living with the Tejas for the Spanish. The original was preserved and is now located in Seville, Spain. Foster reproduces this painting on the cover of his translation of Joutel's diary.

<sup>84</sup> Lilia M. Casis, "Letter of Don Damian Manzanet to Don Carlos de Siguenza Relative to the Discovery of the Bay Espiritus Santo," *Texas Historical Association Quarterly*, Vol. 2, No. 4, April 1899, p. 290.



the Frenchmen indicates that his French captives had achieved some degree of status during their two-year residence. The Tejas left the Spanish encampment the following day. When eventually “captured” by the Spanish in 1689 near Matagorda Bay, Gurule assisted them by providing information and depth soundings he had personally taken. Additionally, he helped chart reefs and map the area.<sup>85</sup>

Archibeque and Gurule had become multi-skilled frontiersmen by the time they departed for Mexico with the Spanish. Both were exposed to the lives of seamen in the coastal areas around La Rochelle. They had backgrounds similar to those of Champlain and D’Aulnay, who were probably the first to introduce the long lot to North America. Archibeque and Gurule had a considerable story to tell the Spanish. They had lived with the Tejas and had been exposed to their language, customs, regional trade patterns, and agriculture. The Spanish had an opportunity to interrogate the survivors about these and also about dangerous Indians, and where they were located, as well as any other information that well-educated, frontiersmen may have possessed. Yet they also represented the French menace which would spur Spanish action in New Mexico and Texas. Archibeque

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<sup>85</sup> Weddle, *Wilderness Manhunt*, pp. 197-198.

and Gurule again crossed the Atlantic Ocean to Spain.<sup>86</sup>

### Archibeque and Gurule with the Spanish

In January 1690, the strange looking Frenchmen arrived in Spain and were confined for questioning.<sup>87</sup> Nineteenth century historian A. F. Bandalier first revealed their story when he discovered a cache of documents in Santa Clara, New Mexico. These papers described the Frenchmen after their capture in Texas. One Captain, Don Andres Perez, supported Archibeque and Gurule during their captivity. Because they knew about Texas, Perez had taken them to the court of Charles II in Spain.<sup>88</sup>

By May 1692, Archibeque and Gurule petitioned in Spain to be released. They agreed to turn their backs on France if they would be returned to New Spain. Documents report that news of their pending return to America made them jubilant.<sup>89</sup> Their confinement in Spain, perhaps spent in something like house

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<sup>86</sup> Bolton, *Spanish Exploration in the Southwest 1542-1706*, pp. 363, 401-403.

<sup>87</sup> Weddle, Robert S., "La Salle's Survivors," *The Southwestern Historical Quarterly*, Vol. 75, No. 4, April 1972, p. 417. Weddle utilized original documents as to the condition of confinement in Spain which are found at the Archives, The University of Texas, Austin, Archivo General de Indias, 1688-1690, also reports of the Junta de Guerra, May 6, June 21, July 28, 1692 pp. 237-240, 241, 249-250. However taking such documents literally may be a mistake. Events and other sources call into question an overly harsh confinement. Hereafter cited as Weddle, "La Salle's Survivors."

<sup>88</sup> A. F. Bandalier, *The Gilded Man*, New York: Appleton and Company, 1893, p. 295.

<sup>89</sup> Weddle, "La Salle's Survivors," p. 417.

arrest, apparently spawned few long-term ill feelings. At the time of their release the Spanish gave them clothes, a stipend, and in July 1692 the two returned to New Spain.<sup>90</sup>

The Frenchmen arrived quite well prepared for life in a Spanish colony. They had already learned, adapted, and survived. They possessed specialized skills and useful knowledge. The Spanish accepted them because they had knowledge necessary for survival.<sup>91</sup> They were striking in appearance. When the Spanish met these Frenchmen they probably learned all they could from them. In these exchanges, elements of French culture likely diffused to the Spanish.

After arriving in Mexico, Archibeque and Gurule joined the Reconquest of New Mexico. In 1693, when they traveled north from Mexico to Santa Fe, these men were among the most experienced frontiersman in the group. Moreover, sources document that Archibeque was a man of unusual charisma and experience. Individuals like Champlain and D'Aulnay had the potential to change history, and it seems that Archibeque and to a

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<sup>90</sup> Esquibel and Colligan, *The Spanish Recolonization of New Mexico*, p. 61.

<sup>91</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 452.

lesser extent Gurule did just that in New Mexico.<sup>92</sup> A close look at their lives among the colonists will demonstrate why they seem to have been the most likely source of the surveying system implemented with Spanish social innovation that occurred after the Reconquest.

As educated people from coastal France, Gurule and Archibeque knew about long lots along with other agricultural practices associated with estuarine drainage.<sup>93</sup> This type of knowledge would have been equally applicable in dry country when establishing irrigation systems. Together, they knew the basics of surveying. They had witnessed dike construction and land reclamation in the lowlands of western France. Reclaiming dry land in a riverine setting would have differed little. As members of an expedition which intended to colonize permanently the lower Mississippi, they would have been expected to possess a range of useful skills. With far more experience in developing land for agriculture than the Spanish who were accustomed to exploiting indigenous people for food, these Frenchmen could easily have

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<sup>92</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 465. William I. Morse, ed. *Acadiensia Nova, 1598-1779: New and Unpublished Documents and Other Data Relating to Acadia*, Vol. 2, London: Bernard Quaritch, 1935, p. 121-124. While Butzer describes how talented individuals influenced the introduction of agricultural techniques in Acadia, the concepts are equally applicable to individuals anywhere including Archibeque.

<sup>93</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 454.

influenced the Spanish.<sup>94</sup>

Thus, Archibeuque and Gurule seem to have carried cultural baggage to the New World.<sup>95</sup> Did Archibeuque and Gurule influence the introduction of long lots in New Mexico? Their presence alone seems to suggest that they influenced the Spanish. After all, they had been interrogated extensively, were released from custody, and were returned to the New World at Spanish expense. To demonstrate what the influence of the first Frenchmen in New Mexico may have been, a general discussion of the resettlement of Santa Fe follows. It shows how their capabilities contrasted with the Spanish leaders and other colonists.

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<sup>94</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 464.

<sup>95</sup> Butzer, "French Wetland Agriculture in Atlantic Canada and Its European Roots," p. 464. R. Peattie, "Farms and Farming in the Lower St. Lawrence Valley," *Journal of Geography*, Vol. 21, 1922, pp. 174-179. Hart "Field Patterns in Indiana," pp. 456, 464. Kollmorgen and Harrison, "French Speaking Farmers of Southern Louisiana," pp. 153, 156. Jordan, "Antecedents of the Long-lot in Texas," p. 81. Harris, *The Seigniorial System in Early Canada*, pp. 119-121.

## Chapter 5

### New Mexico after the Reconquest: Long Lots, Innovation, and a French Connection after 1693

With my own eyes, I carefully considered the excessive misfortune and nakedness of those who were recorded in the census and, likewise, the nakedness of all the women, children, and their domestics, whom they call servants.

Don Diego de Vargas, 1693<sup>96</sup>

Isolated from the centralized powers in Europe, authorities on the frontier controlled colonial development. In Spanish New Mexico, these circumstances brought many into prominence, including Frenchmen. For the most part, common artisans, urbanites, former conquistadors, and those Vargas called “naked” settled New Mexico. Most were in pitiful condition. After 1695, he then faced the problem of granting land to relatively large numbers of settlers who had been promised parcels to sustain themselves and the colony. As already demonstrated, deed records and other evidence show that the plots granted under the authority of Vargas, and those after, were largely long lots. In eliminating the *encomienda* and subsequent reforms, Vargas was responsible for social innovation that eventually facilitated agrarian development, but who contributed the specific idea of the long lot during the

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<sup>96</sup> Vargas, Kessell ed. , *Vargas Journals, 1692-1694*, Vol. 3, pp. 34, 66.

period of initial reoccupation?

### Diego de Vargas, Social Innovator

Had the innovator of the long lot system been a Spaniard, a member of the leadership would be the likely candidate. By authority given with laws in place since 1511, local Spanish officials had near complete control over granting lands.<sup>97</sup> Vargas controlled New Mexico after 1693, ordered the formation of the earliest settlements, and exercised considerable authority in land distribution. Noting his own power, Vargas wrote in 1694:

. . . I may send people satisfactory to me for the task of seeking out and acquiring families and other people who may present themselves and wish to go settle New Mexico . . . I am also to arrange for its settlement and the distribution of land . . . also left completely to me.<sup>98</sup>

While Vargas was the governor when long lots were introduced, none of his writings suggest that he invented the idea independently or even considered it.

Born into the Spanish nobility, Vargas served as a career government official in New Spain. In describing his outlook on life, John Kessel said “he held firmly to the honored tradition of

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<sup>97</sup> SANM I, Vol. I, Roll #42, PLC #80, p. 1.

<sup>98</sup> Vargas, Kessel, Vargas Journals, *Blood on the Boulders*, Book 1, p. 470.

warrior-knight.”<sup>99</sup> Vargas was adaptable and well read on a range of subjects. He owned books about kings, noblemen, and the Court of Madrid, as well as practical books on politics, law, military science, architecture, and cooking. Vargas was a soldier and an aristocrat. One contemporary called him the new Hernan Cortes. Vargas wrote often about the concerns of a soldier in conquering and subduing the Pueblos. While demonstrating his competence on many levels, a substantial amount of source material shows that he was no agricultural inventor.

While agrarian concerns are well represented in six volumes of his collected writings and other materials about Vargas, he was portrayed as an administrator who ordered seed and supplies and distributed cattle. Agricultural planning seems not to have been his forte. His writings reflected the logistical concerns of a bureaucrat.

Through his administration he did prove to be a social innovator. In a dramatic departure from the encomienda, need rather than race or social class guided the allocation of land that Vargas had distributed fairly among those who went to New Mexico after 1695. Initially, he probably had squares and rectangles in

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<sup>99</sup> Vargas, Kessel, *The Journals of Don Diego de Vargas, 1675- 1704*. Specifically referenced here *Remote Beyond Compare, Letters of Don Diego Vargas to his Family from New Spain and Mexico, 1675-1706*, 1989, p. vii. This volume hereafter cited as Vargas, Kessel, ed., *Vargas Letters, 1675-1704*.



mind when he did so because he carried a copy of the Law of the Indies with him and used it to guide him in settlement decisions.<sup>100</sup> Absent some external stimulus, Vargas quite likely would have followed the only settlement guide he possessed because of the conservative nature displayed by the Spanish in their colonial and agricultural pursuits.

Moreover, Vargas owned agricultural fields in Spain and knew how they were laid out. Vargas also knew about irrigation in Spain's dry climate. He probably carried traditional ideas of Spanish landscapes with him. However, the problems he found with metes and bounds in Spain may have left him open to suggestion when he arrived in New Mexico. Indicating the extent of his agricultural knowledge as he prepared to reconquer New Mexico, Vargas wrote to his son-in-law in 1691:

. . . As I write, I am about to leave on a campaign against the barbarous, rebel nations of this kingdom . . . I expect that your lordship will have inspected the vineyards, lands, and other property . . .

Many parcels of the Torrelaguna lands border on those of the entail held by my lady and aunt . . . From a look at the papers and an examination of the boundaries, my brother-in-law . . . will see that many of my lands are usurped. The farmers to whom my lord and uncle . . . rented have encroached upon them. As such a right minded gentleman, he will realize this and restore my full entail . . . I know that the olive trees are harvested and that the irrigated land can be sown in

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<sup>100</sup> Vargas, Kessel, *Letters of Vargas, 1675-1704*, pp. 11-91.

barley . . .<sup>101</sup>

He commented further on land divisions:

I left the holdings and entail of Carmana del Cano and Camarma de Esteruela in fine shape. Everything is surveyed, with clear boundaries, as will be found in the survey among the papers of my entail . . .

. . . when I was there for the sole purpose of inspecting the entail, I saw everything. I was at the farm called Barcinas that is part of the entail. It was very well stocked, with its very good, fortified house and many fields bordering on the lands belonging to the canons of El Monte Santo. Water for irrigation of these lands legally belongs to the farm . . .

Because it was necessary to increase the revenue from these lands, to assure their yield, and to rebuild . . . the dam on the small river that passes through them . . . Your lordship should first have the dam put in operation . . . With the dam finished, they said they will pay regularly one-third of the seed, because with irrigation their harvests are assured.<sup>102</sup>

In this letter Vargas displayed the knowledge of an interested landlord. Importantly, he made errors in judging the actual farming operations on the ground and wrote nothing elsewhere about surveying methods or rationalized systems of land distribution.<sup>103</sup> Apparently, he never witnessed the use of long lots in Mexico or Spain.

In his letters about land and agriculture, Vargas displayed a tie to tradition. In a 1704 power of attorney written in Santa Fe

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<sup>101</sup> Vargas, Kessel, *Letters of Don Diego Vargas*, pp. 157-158.

<sup>102</sup> Vargas, Kessel, *Letters of Don Diego Vargas*, pp. 158-161.

<sup>103</sup> Vargas, Kessel, *Letters of Don Diego Vargas*, pp. 156-161, 165.

and delivered to his son-in-law in Spain (after long lots were being used in New Mexico) Vargas orders a survey by local authorities as follows:

He also is to take great care in the cultivation of said vineyard and of its olive groves, trying to plant and propagate the vines in such a way that they may be filled with vine stocks and its field cultivated. Let him undertake to survey the croplands by authority of the *justicia ordinaria* of the districts where they are located and where it may be necessary. Also, for security, let the boundaries be marked in the presence of said *justicia*, an *enscribano*, and the eldest, best informed, and conscientious persons. . . .<sup>104</sup>

Vargas gave no specific instructions as to method of cultivation or survey, so he must have assumed these would be carried out in the same traditional ways he knew before going to New Mexico.

Malcom Ebright described the cultural landscape Vargas probably had in mind when he imagined New Mexico before 1693:

The Spanish land-holding towns established in New Spain were based on Castilian agricultural villages with which the conquerors were familiar as well as the rules of the *Recopilacion* . . . . Each family (*vecino*) received a building lot (*solar de casa*), usually fifty *varas* square, a garden plot (*suerte*), and one or two *caballerias* of land for field crops ( a *caballeria* contained approximately 105 acres).<sup>105</sup>

Within this traditional context, land divisions and grants were made

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<sup>104</sup> Vargas, Kessel, *Letters of Don Diego Vargas*, p. 294.

<sup>105</sup> Malcom Ebright, *Land Grants and Lawsuits in Northern New Mexico*, Univ. of New Mexico Press, 1994, p.18. Hereafter cited as Ebright, *Land Grants and Lawsuits in Northern New Mexico*.

locally by the alcalde or other ranking official in squares, rectangles, or by cultural boundaries. No central government authorization was required. In addition to social class, the most important requirements in issuing a grant were continuous habitation and use rather than the formalities of a granting process.<sup>106</sup>

Noting changes in the settlement pattern that occurred at the time of Vargas, historian Marc Simmons commented:

The more prosperous ranches might have developed in New Mexico a settlement pattern similar to that which soon appeared in the neighboring Nueva Vizcaya, with widely scattered large properties supported by the labor of independent Indians or poor mestizos. The Pueblo revolt of 1680, however, extinguished the Spanish settlement clusters in the upper Rio Grande Valley and forced a withdrawal of surviving colonists to the El Paso district down-river. When colonization resumed some . . . years later, new patterns emerged.<sup>107</sup>

Simmons continued:

From 1700 to the end of the Spanish period, loose agglomerations of small farmsteads termed *ranchos* became the typical unit of colonization, in marked contrast to the seventeenth century during which the *hacienda* had predominated. In considerable measure, this shift from large land holdings to farms of more modest size may be attributed to the decrease in Pueblo Indian population, which greatly reduced the labor

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<sup>106</sup> Ebright, *Land Grants and Lawsuits in Northern New Mexico*, pp. 132-134.

<sup>107</sup> Marc Simmons, "Settlement Patterns and Village Plans in Colonial New Mexico," *Journal of the West*, Vol. 8, 1969, p. 11. Hereafter cited as Simmons, "Settlement Patterns and Village Plans in Colonial New Mexico."

supply, and to increase the numbers of Spanish colonists, whose arrival created a heavy demand for farmlands in the old core area of the Rio Grande valley.<sup>108</sup>

Soon after the Reconquest during the transition described by Simmons, the Spanish first utilized long lots in the region around Santa Cruz and then around Santa Fe. Someone suggested the use of long lots, they were adopted, and these evolved into line villages with long lot patterns still evident in New Mexico at present. Even so, Vargas wrote nothing about the notable change in settlement patterns while he gave detailed orders on most other affairs of New Mexican development. This indicates the shift was probably not his idea or a system of land distribution based on his own assessment of the environment. Had this been the case, bureaucrat and politician Vargas would probably have described his innovations to superiors.

Archibeque and Gurule were present all the while when Vargas planned and established Santa Cruz. The Frenchmen had been in New Mexico about eighteen months by that time. After receiving orders to establish the agricultural villa at Santa Cruz, Luis Granillo, commanding in the absence of Vargas, apportioned the lands equally to the settlers in order to accommodate the

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<sup>108</sup> Simmons, "Settlement Patterns and Village Plans in Colonial New Mexico," p. 11.

planting of one fanega of corn each. Significantly, Archibeque and Gurule were there when carefully predetermined plots of land were distributed in Santa Cruz in a manner that would have been familiar to colonists in Quebec. Granillo seemed to be following instructions and offered nothing in his reports to suggest he may have made changes in land division methods.<sup>109</sup>

Someone among the group influenced the settlement pattern. However, the technical innovation evident in the new rational land division, fundamental to Spanish reforms, seems to have originated outside the Spanish leadership because there was no mention of this aspect of agrarian planning. Even though the Spanish left notable reports and records demonstrating their social innovation following the encomienda, sources failed to illuminate a Spanish source for the agrarian innovation in long-lot farms. Local ecology probably played no role in causing Vargas to change his traditional behavior because New Mexico presented the same arid environment to which Vargas and the Spanish were already accustomed. A traditional response would be expected. Vargas claimed complete authority over land division. He kept detailed records of his correspondence and the people on the expedition. Seemingly, one of the colonists, who Vargas recognized and respected, suggested the long lot.

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<sup>109</sup> Bailey, *Diego Vargas and the Reconquest of New Mexico*, pp. 603-637.

Only a few among the group would have been likely to have influenced settlement patterns in a dramatic and permanent way. Seventeenth and early eighteenth century Spanish documents listed the likely innovators--those who affected the way people lived in New Mexico. Biographical and cultural information on those reoccupying New Mexico after 1693 suggests that Archibeque and Gurule were among the group who caused change.

### **Analysis of the Vargas Colonists**

When the Spanish settled colonists at Santa Cruz a number of features made the long lot useful and beneficial. Determining fair plot sizes was a problem for the new agricultural settlement because the Spanish lacked a rational system of land surveying and distribution. Fair and equal were coming to mean different things under the emerging norms of the colony, compared to earlier settlement guided by the encomienda and class structure. Thus, initial surveying--before occupation and cultivation began--was a challenge. Alien to Spanish tradition, long lots solved the problem. By measuring and allotting land in predetermined widths perpendicular to a permanent irrigation ditch, numerous ribbon-like fields were created. Additional settlement could be arranged on tiers built on new irrigation works, or by adding new long lots at

dams positioned upstream or downstream. While central authorities believed the line settlements to be indefensible, local residents still preferred their houses on the narrow lots which allowed owners to observe and protect their fields. The reasons for adopting such a cadastral pattern are clear, but who among the Spanish colonists and officials were the most likely innovators and the source for long lots?

The foremost scholar on the origin of Spanish people in New Mexico, Fray Angelico Chavez, described the colonizing groups as follows:

Don Diego de Vargas, second colonizer of New Mexico, was appointed to lead the refugee colonists back to their homeland. . . . [H]e had already noted that the original New Mexicans. . . were too few for an effective attempt at re-colonization. So he recruited soldiers in Spain and New Spain, as well as civilian colonists with their families in the Valley of Mexico and the country around Zacatecas. Hence his Reconquest colony consisted of various distinct groups.

1. **The Native New Mexicans.** Here were the faithful Archuletas, Bacas, Chavez, Luceros, Montoyas, etc., whose families had increased during the thirteen-year exile at Guadalupe del Paso.

2. **The Soldiers from Spain.** How many of Vargas' "hundred gentlemen soldiers from Spain" actually came is not known, but only a few remained to found families, like Paez Hurtado, Fernandez de la Perera, Roybal, and others.

3. **The "Espanoles Mexicanos."** The Viceroy himself had selected these "sixty-seven" Spanish families living in the City and Valley of Mexico. They



were assembled by Cristobal de Velasco, but came under the supervision of Fray Francisco Farfan. . . . Here came the Aragon, Medina, Ortiz, Quintana, and many others. While some individuals seem to have hurried up to join the expedition as soldiers for the Reconquest in December, 1693, the bulk of these people did not arrive in Santa Fe until June, 1694.

4. **The Families from Zacatecas.** These people were recruited at Zacatecas and the Mines of Sombrerete by Juan Paez Hurtado. There is no known list of them extant, so that families belonging to this group are known from references in scattered sources. Here came such names as Armijo, Vigil, Vargas, etc. These people did not arrive in Santa Fe until May, 1695.

5. **New Mexican of Guadalupe del Paso.** Some people who had lived, or were even born, at Guadalupe del Paso, and considered themselves New Mexicans, decided to move north, like the Padillas and Pereas. Similarly, several northern New Mexicans were allowed to remain in the new settlements they had founded in 1680, where their descendants are found to this day. By this time, however, the Crown had decided that this southern district did not belong to the Kingdom of New Mexico, but the Province of Nueva Vizcaya.<sup>110</sup>

Chavez continued and described where they went and how they settled:

Geographically, the Kingdom was smaller in extent than before the Rebellion. . . . [N]ew settlements sprang up along the Rio del Norte from Taos Valley down to Tome. Two new "Villas," besides Santa Fe, were Santa Cruz de la Canada and Albuquerque. On the sites of former "estancias" the increasing numbers of settlers formed into hamlets on either side of the river. . . .

New settlers came sporadically between 1700 and

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<sup>110</sup>Chavez, *Origins of New Mexico Families*, pp. xvi-xvii.

1800, bachelors who married local women and left many descendants. There were two Frenchmen already in Vargas' time, Archeveque and Grolet. . .<sup>111</sup>

Of these colonists, historian John Kessel notes: “. . . while a wide variety of occupations was included among the group of recruits, there seems to have been no systematic attempt to provide all the skills necessary for the success of the frontier colony.”<sup>112</sup> Nonetheless, these people laid out long lots and formed self-reliant agrarian villages.

In time, they grew and traded food, maintained and built irrigation systems, and managed an agricultural economy facilitated by the long-lot settlement pattern. The initial policy of alienating land in long lots was a crucial decision for the colony, but at first no one in the Spanish hierarchy with the responsibility for creating communities had any experience settling people in self-sufficient agrarian rather than feudal colonies. Nothing in their background suggested they caused the change in settlement planning. From information supplied by Chavez and others, the colonists can be reasonably excluded as the likely source of long lots--except for the Frenchmen. Without these Frenchmen, the Spanish would probably have developed a land division scheme that would have been similar to that in Spain and Mexico, much

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<sup>111</sup> Chavez, *Origins of New Mexico Families*, p. xvii.

<sup>112</sup> Vargas, Kessell ed. , *Vargas Journals, 1692-1694*, Vol. 3, pp. 8-9.

like what developed around Nacogdoches, as discussed in the next chapter.

A wide variety of Spaniards and mestizos colonized New Mexico between 1693 and 1695. None were surveyors or others likely to develop a scientific method of land division. Surprisingly, there were few if any who gave their primary occupation as farmers--in fact all the known rosters of colonists recorded no farmers at all. The lack of farmers probably explains the trouble the refugees faced in El Paso from 1680-1693.<sup>113</sup> The first group of colonists was described by Vargas himself. He noted that they were in pitiful condition after living in the vicinity of El Paso for about twelve years. Vargas described them to be in great need, and he found no one with any useful talent. Apparently, this group included no one that Vargas could identify who would be capable of immediate innovation, even though they eventually adapted and created permanent agrarian villages.<sup>114</sup>

Kessel, who translated and interpreted voluminous amounts of Spanish documents, described the second major group of colonists:

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<sup>113</sup> Vargas, Kessel ed. , *Vargas Journals, 1692-1694*, pp. 37-67, 77-97, 223-343. Vargas, Kessel ed., *Vargas Journals, 1694-1697*, Vol. 4, Book 1, 1998, pp. 467-572.

<sup>114</sup> Vargas, Kessel ed. , *Vargas Journals, 1692-1694*, Vol. 3, pp. 65-67. Vargas was a politician so it is possible these descriptions were politically motivated.

Among the occupations represented were weaver, tailor, cobbler, stone and brick mason, cartwright, miller, cabinetmaker, musician, carpenter, coppersmith, blacksmith, cutler, barber, painter, paver, and chandler. All these skills were relatively low prestige. . .<sup>115</sup>

This group included the Frenchmen, who represented themselves as part of the upper class, and who were among a very few with proven experience that would be beneficial to the early colonization of New Mexico.

Led by Juan Paez Hurtado, the third major group arrived in 1695. While no complete roster exists, documents listed twenty-one soldiers, four citizens, and twenty-one Indian allies of mixed Indian and Spanish blood. A physician, a secretary to the viceroy, a foundryman, a miner, and a blacksmith were within the group.<sup>116</sup> In the beginning, dreams of profit and status clashed with the realities of frontier life. Chavez explained the initial motivation for settlement:

Nor were they looking primarily for mere material benefits and a new home, like those [colonists] of France. Rather, in the truly characteristic fashion of southern Castile (La Mancha and Extremadura), they risked life and limb chiefly because they had been promised the title of “hidalgo” if they came and stayed. An empty incentive, this, to any other people, but not to these whose names and blood went back ultimately

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<sup>115</sup> Vargas, Kessell ed. , *Vargas Journals, 1692-1694*, Vol. 3, pp. 7-8.

<sup>116</sup> Vargas, Kessell ed. , *Vargas Journals, 1694-1697*, Vol. 4, Book One, pp. 467-572.

to that stark land of central Spain where Cervantes had his Don Quijote and Sancho Panza seeking islands to rule.<sup>117</sup>

They wanted to be powerful encomenderos like the generation that preceded, but it soon became clear that all they would receive would be the material benefits of the land and a home, much like the colonists of New France. In 1695 at Santa Cruz, with two Frenchmen present, landless people gathered when long lots were probably first used. Only two Frenchmen and a small group among the Spanish could have influenced settlement patterns. At that time, with the Paez Hurtado group soon scheduled to arrive, they faced the problems of surveying, alienating more than sixty plots, and documenting the land each received. The Frenchmen and Spanish had different traditions dictating how to do so.

The Vargas-led Spanish settlers were urbanites. They were skilled in areas other than agriculture and were unlikely to be advocates of rational surveying systems. The problems that transpired during the first years in New Mexico reflected their agrarian inexperience. The artisans and tradesmen, purposefully selected for the colonizing expedition by the government in Mexico City, initially floundered in New Mexico. The colonists ate their

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<sup>117</sup> Chavez, *Origins of New Mexico Families*, p. xix.

seed and consumed their breeding livestock. The lack of agricultural production prompted officials to describe them as slothful.<sup>118</sup> More than likely, the lack of production and the need for aid reflected inexperience rather than laziness, along with an absence of sound colonial planning. In 1696, Vargas called the Santa Cruz settlers ignorant and incompetent farmers.<sup>119</sup> Initially, it would have been an overwhelming proposition for urbanites to sustain themselves on the frontier without the Pueblo Indians who they once exploited for labor and knowledge. It took years for the Spanish to develop self-supporting communities, and it seems unlikely that the Spanish among them independently invented their long lot system.

The experiences and background of the Spanish colonists suggested they assessed their environment in a traditional way, but they still used a substantially different, ordered method of settlement for the upper Rio Grande basin.<sup>120</sup> Seemingly, without an influence, the inertia of tradition as well as pressures from officials in Mexico City would have produced a Spanish-like landscape. Officials in Mexico City voiced their expectations that the colonists should settle around a central defensible plaza and

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<sup>118</sup> Vargas, Kessell, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, pp. 3, 10, 14, 19.

<sup>119</sup> Vargas, Kessell, *Vargas Journals, 1694-1697*, Vol. 4, Book 2, p. 1076.

<sup>120</sup> Chavez, *Origins of New Mexico Families*, pp. 119-335. Chavez lists each family alphabetically along with biographical details on each. See also Vargas, Kessell, *Vargas Journals*.

work dispersed irrigated fields. The adoption of long lots and associated settlement pattern represented a radical departure from custom. It should be remembered that innovation and adaptation to the physical environment took centuries in the Canary Islands where Spaniards continued farming in traditional ways that failed. These Canarians were surrounded by an obvious stimulus for change: the Atlantic Ocean.

Thus, evidence suggests that Spaniards made assessments of the environment and evaluated local ecology guided by tradition, and shows there were others present who knew long lots would be an effective method of occupying the region around Santa Cruz. The source seems to have been someone who knew long lots and line settlements as a part of his cultural baggage. In addition, the source had to have the necessary clout or prestige to bring about adoption.

### **Frenchmen and the Vargas Plan for Santa Cruz**

Between 1693 and 1696, Vargas determined how the colony would develop. He outlawed the use of forced Indian labor and prohibited contact with the Pueblos which forced the Spanish to become agriculturists. Because of their experience in dealing with several Indian groups, Archibeque and Gurule were probably of

value to Vargas when Spaniards took Santa Cruz and its irrigation works from the Pueblo Indians.

In March 1695, Vargas ordered Santa Cruz to be settled as follows:

So that they immediately be given a permanent location for their settlement; lands to sow; grass, woods, water and watering places. . .

He [Luis Granillo] is to reconnoiter for himself and confer with the others how many citizens can settle the land, according to its quality and extent, giving them land that both groups may cultivate and sow, without hindering one another. . . He will make the demarcation, map, count, and regulation in this manner.<sup>121</sup>

Granillo followed the orders of Vargas, and Archibeque was likely a part of the military force doing the reconnoitering. In 1695, Vargas issued the following orders for the settlement of sixty and “a half” families in Santa Cruz:

Because the community has come and is from the same place and region, with a view to their harmony and so they may be together in pleasant company . . . I confer and designate for them, in the first place, the said Pueblo, its dwellings, and its cleared agricultural lands, ditches, acequias, and the dam or dams the Indian inhabitants had or used to have for irrigation to enjoy their harvests.<sup>122</sup>

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<sup>121</sup> Vargas, Kessel, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, p. 605. In about 1914, Ralph Twitchell translated the same documents describing the settlement that occurred in Santa Cruz. Twitchell, “Settlement, 1695,” SANM I, Translations, Roll #7, Archive #882, pp. 1-31. Kessel’s translation is quoted here because it is the more recent work.

<sup>122</sup> Vargas, Kessel, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, p. 618. Twitchell, “Settlement, 1695,” p. 18.



Vargas further described the land grants in Santa Cruz:

I am giving them everything clearly improved . . .  
I am indicating for them lands cleared and plowed,  
known for their great fertility, with their ditches,  
acequias, and dams in working order, with irrigation  
insured as well as new houses. They need nothing more  
than to enter immediately to live in them and prepare  
their lands which I will designate for them.<sup>123</sup>

Vargas gave the Santa Cruz settlers the power to  
determine land division in long lots when he wrote:

I shall grant its ranchos and haciendas to those who are  
there and better consider the distribution to give them  
more comfort and be able to provide it for the citizens  
who will later be added and increase it.<sup>124</sup>

The settlers arrived in the new villa of Santa Cruz in 1695.

Vargas left the villa before lands were distributed but gave  
instructions to Granillo. In his final instructions, he told Granillo  
to gather in Santa Cruz the settlers who had no land. Vargas wrote,  
“He [Granillo] should give and distribute the unallotted lands,  
indicating for them what he might think necessary for each citizen  
with a family to plant a half-fanega of maize.”<sup>125</sup> That these were  
long lot fields seems clear because once a field pattern is  
established, it is difficult if not impossible to change, and the Santa

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<sup>123</sup> Vargas, Kessell, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, p. 619. See also Twitchell, “Settlement, 1695,” SANM I, p. 19.

<sup>124</sup> Vargas, Kessell, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, p. 619. See also Twitchell, “Settlement, 1695,” SANM I, p. 20.

<sup>125</sup> Vargas, Kessell, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, p. 624. See also Twitchell, “Settlement, 1695,” SANM I, pp. 25-26.

Cruz Valley is lined with long lots today.

Before the 1680 Pueblo Revolt, Granillo had been a landless soldier in Santa Fe. In 1692, Granillo told Vargas he had been serving Spain as a soldier for thirty-nine years without being made an “encomendero,” but he wanted to be. He had been a principal leader of the “naked” in El Paso before being recruited by Vargas. Despite his leadership position, there is no evidence suggesting that Granillo invented a rational system of land division, especially in light of his support of the encomienda.<sup>126</sup>

So when Granillo gathered the first group together for a lottery to determine ownership of irrigable land, they probably had been influenced by an experienced and knowledgeable person. Archibeque, a person of “particularly strong spirit,” knew about long lots and was likely there with Granillo.<sup>127</sup>

After consulting the assembled group and before the lottery, Granillo determined the boundaries of the plots. To do so, he walked about 150 paces along the irrigation ditch and marked off a lot. He repeated the process of marking individual parcels about 150 paces wide until enough lots had been designated for each of the landless settlers. The lengths of each parcel were considerably

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<sup>126</sup> Vargas, Kessell, *Vargas Journals, 1692-1694*, p. 48.

<sup>127</sup> The Talon brothers reported in 1692 that Archibeque was a man of “particularly strong spirit.” Huntington, “Talon Interrogation,” *Iowa Review*, vol. 15, no. 2, 1985, p. 120.

more than the widths, so initially lengths were left undetermined.<sup>128</sup>

Thus, we know that long lots were paced, and we can understand why they were favored, yet determining who masterminded them requires more than demonstrating the mere presence of Frenchmen and the lack of evidence supporting Spanish independent invention. True, the Frenchmen were there from the beginning. They had far more experience relevant in developing a self-sufficient colony than most of the Spanish. So, the sudden appearance of a French landscape in New Mexico necessitates a deeper look at the Frenchmen and their place in the isolated community.

The Frenchmen were influential. Santiago Gurule was a formidably skilled man who had already demonstrated his surveying ability. He fought as a soldier in the Reconquest and may have served in a role something like the indispensable D'Aulnay in Acadia.<sup>129</sup> Gurule was among the disgruntled colonists who, frustrated by poor planning, started clamoring in 1695 for his promised land grant. Documents recording the livestock distribution of 1697 listed Gurule as a recipient, so by then he must have received a farm on which to put the animals.<sup>130</sup> In 1699,

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<sup>128</sup> Bailey, *Diego Vargas and the Reconquest of New Mexico*. Carlson, "Long Lots in the Rio Arriba," p. 50

<sup>129</sup> Weddle, *Wilderness Manhunt*, pp. 197-198.

<sup>130</sup> Vargas, Kessel, *Vargas Journals, 1694-1697*, Vol. 4, Book 1, p. 1156.

Gurule married Elena Gallegos and moved to Bernallio, where he disappears from public life--but started a large family still in New Mexico.

If Gurule was the equivalent of D'Aulnay, Archibeque was New Mexico's Champlain. Undoubtedly, he remembered the ideas of France, which included methods of agricultural production witnessed in riverine areas. As noted, Archibeque joined the Spanish effort to reestablish Santa Fe in 1693. There, he married his first Spanish wife, Antonia Gutierrez. He lived in Santa Fe and other locations in New Mexico until his death in 1720.<sup>131</sup> In his twenty-seven years with the Spanish, he became a prominent soldier, trader, and citizen.<sup>132</sup> Of Archibeque, Twitchell wrote: "In his vacant hours he was much inclined to volunteer advice. . . ."<sup>133</sup>

In 1893, A. F. Bandalier, the scholar who discovered the French connection, described Archibeque:

The 'Captain' and former soldier Juan de Archibeque, enjoyed with the Spanish military officers no less a degree of confidence than was reposed him as a merchant by the same officers and people in general. He was consulted concerning all important enterprises; and the minutes are in my hand of several war councils

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<sup>131</sup> David J. Weber, *The Spanish Frontier in North America*, New Haven: Yale University Press, 1992, pp. 170-171.

<sup>132</sup> Robert S. Weddle, *The Wreck of the Belle, the Ruin of La Salle*, College Station, Texas A&M University Press, 2001, p. 257.

<sup>133</sup> Twitchell, Ralph Emerson, *Old Santa Fe; the Story of New Mexico's Ancient Capital*, Chicago: The Rio Grande Press Inc., 1925, 1963. p. 166

in which his views were influential.<sup>134</sup>

In 1697, Archibeque received a land grant and shares of supplies equal to the other Spanish colonists. Archibeque was on military patrol at the time of the distribution, but his wife accepted the grant in his absence.<sup>135</sup> Archibeque participated in the military campaigns to pacify the Pueblo Indians between 1693 and 1697. His status apparently increased in New Mexico, and he thrived in Spanish society. His quick rise to prominence must have been facilitated by early accomplishments.

Archibeque was important in civil and military affairs. He negotiated and traded with the Jumanos and tribes of the Great Plains at El Quartejejo in present-day Kansas where he also owned a trading post. He became wealthy and had a large family. Tellingly, his last will had eighty-five pages, indicating he was among the wealthiest people in New Mexico.<sup>136</sup>

Archibeque proved adept in Spanish politics. By 1697, Vargas was suspected of fraud in his administration of the colony's financial affairs, and he returned to Mexico City in order to clear his name. Archibeque still thrived despite a change in government.

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<sup>134</sup> A. F. Bandalier, *The Gilded Man*, New York: Appleton and Company, 1893 p. 299

<sup>135</sup> Vargas, Kessell, *Vargas Journals, 1694-1697*, Vol. 4, Book 2, pp. 1146, 1156.

<sup>136</sup> Vargas, Kessell, *Vargas Journals, 1697-1700*, Vol. 5, 2000; pp. 127-129. Twitchell, *The Spanish Archives of New Mexico*, v 2, p. 185. Juan Archibeque, Last Will and Testament, 1721, SANM 1, Roll #1, Frame # 13, Twitchell # 007.

By 1702, records revealed that he was in a position of some responsibility. He had been selected to accompany Captain Juan de Ullibarri of Santa Fe on his inspection of Pueblo villages from March 4-8, 1702 in order to investigate a planned revolt. Archibeque was appointed an attending witness to each of fourteen proceedings with local officials.<sup>137</sup> In 1716, he was elected to a position that may have been like deputy mayor, which Twitchell called “alcalde of the second vote of the City of Santa Fe.”<sup>138</sup> After his wife Antonia Gutierrez died, he married Maria Roybal, the daughter of the *alcalde mayor*. The governor of the territory, Antonio de Valverde Cosio, served as a witness.<sup>139</sup>

Frenchmen Archibeque and Gurule were likely present at the time long lots were adopted. They were probably neither shy nor reserved. They arrived in Santa Fe on the eve of a major Pueblo Indian uprising under conditions described as follows by one historian:

The rest of the Pueblo world fought back. . . .  
[T]hey swept down in guerilla raids and dared the Spaniards and their weak-willed allies to dislodge them.

Accepting the dares, Vargas campaigned almost without rest. On a hot July day, he ordered Sebastian Rodriguez, his African herald, to beat the drum in the villa’s two plazas and proclaim another military action.

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<sup>137</sup> Vargas, Kessell, *Vargas Journals, 1700-1704*, Vol. 6, pp. 166-178.

<sup>138</sup> Twitchell, *The Spanish Archives of New Mexico*, vol. 2, p. 180.

<sup>139</sup> Robert S. Weddle, “La Salle’s Survivors,” *The Southwestern Historical Quarterly*, Vol. 75, No. 4, April 1972, p. 419

Because of previous hostilities, the colonists had been unable to plant in the spring, and food supplies were all but exhausted. A month earlier, the two hundred or so new recruits gathered in Mexico City, including the three Frenchmen, had reached Santa Fe with Fray Francisco Farfan. The resultant crowding had caused bad feelings. Not only did the midsummer operation promise captured maize and other foodstuffs, but also . . . [adventure].<sup>140</sup>

The Frenchmen could easily have thrived and made reputations for themselves under these conditions. After fighting in intense combat with the Pueblos, Spanish leaders could have listened to advice, especially from Archibeque, who portrayed himself to be of noble birth. Archibeque was particularly talented and had an aggressive demeanor.<sup>141</sup> When he gathered with the other colonists in want of land, circumstantial evidence suggests that he may have taken the lead in surveying a pattern that divided equitably the limited valley bottomland while giving all farmers frontage on the irrigation ditch lifeline.

Beyond the documents which offer substantial information, the exact interaction which caused the diffusion of the long lot can not be determined. We must, therefore, rely on the evidence that portrays the Frenchmen as having influence in New Mexico at the

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<sup>140</sup> John L. Kessel, *Spain in the Southwest; A Narrative History of Colonial New Mexico, Arizona, Texas, and California*, Norman: Univ. of Oklahoma Press, 2002, p. 173. Hereafter cited as Kessel, *Spain in the Southwest*.

<sup>141</sup> Huntington, "Talon Interrogation," p. 120.

time long lots were adopted. Therefore, they seem to have been the most likely source. The frontier-tested Archibeque, flanked by his friend Gurule, seem to have stepped forward. They were among the disgruntled, landless colonists, and that they suggested a way to distribute the land quickly and fairly seems plausible.

The evidence in support of Archibeque as the innovator is especially compelling. The Spanish urbanites and former encomenderos were relative novices in establishing new agricultural lands. Archibeque was an educated man with a commanding stature. His story must have been well known. He was in New Mexico when Vargas and Granillo were making decisions. That Vargas asked the well experienced Frenchmen of the noble class what he thought seems likely. The Frenchmen would have suggested a system of parcelization and utilization of dams and ditches similar to that of western France. That Vargas agreed with Archibeque also seems likely. In fact, the Spaniards divided the land in the manner of the French.

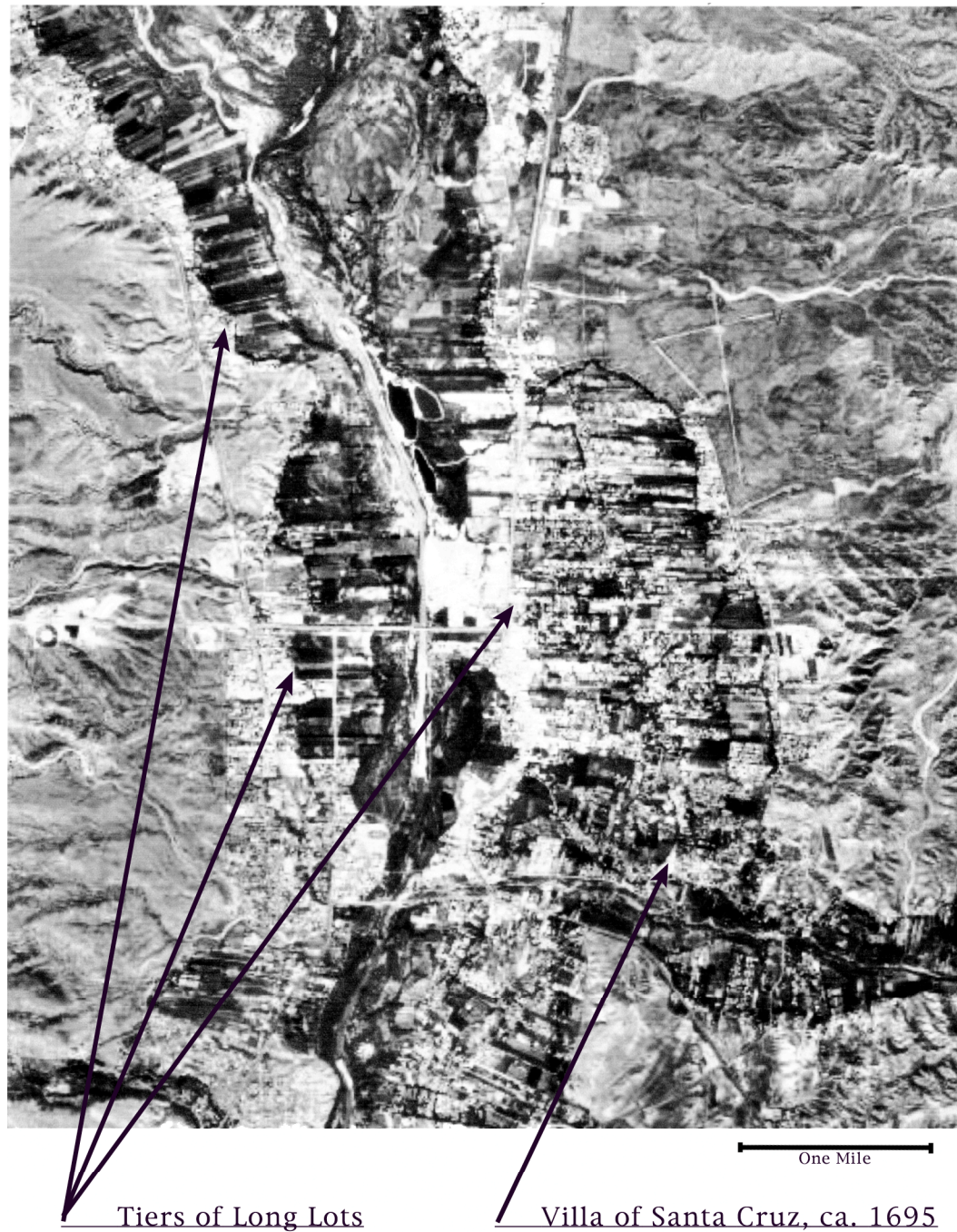
From its introduction the long-lot survey system provided a foundation for Spanish settlement in New Mexico. Frenchmen probably introduced it. Immediately, it provided the majority of the people with land and water, when traditional Spanish survey methods would have been cumbersome and time-consuming. The



simplistic planning of Spanish officials created circumstances leading to innovation. Out of necessity, with no surveyors or anyone else with apparent experience, the long-lot system was accepted from Frenchmen and adapted to Spanish needs. A major change had occurred from the encomienda and familiar use of large land grants supported by exploitation of indigenous people to more universal ownership of small long-lot plots for self-sufficient farms.

The presence of influential Frenchmen in New Mexico at a time when a French cultural attribute appeared seems more than coincidental. Moreover, there is no evidence of a Spanish innovator. Absent Frenchmen in New Mexico from the first days of its Reconquest, the Spanish would have probably developed a land division scheme that would have been more traditional and like that evident in the Pueblo villages. Yet, the long lot is the only survey system documented in historical records or visible around Santa Cruz today (Map 5.1). At about the time of Archibeque's death, Spaniards were learning of long lots in East Texas, and adopting them in San Antonio. The reasons behind acceptance of long lots in New Mexico seem to explain their adoption in Texas.

Map 5.1 La Canada de la Santa Cruz, 1996



U.S. Geological Survey (USGS), Santa Cruz New Mexico, 10/6/1996,  
USGS TerraServer, Microsoft Corporation, 2004

## Chapter 6

### San Antonio and the Second French Connection, 1690-1731

Belated recognition that apparent innovations were widely known, and much earlier than “expected,” may derive only from the cumulative sum of decades of cross-disciplinary research, often after fresh lines of investigation have been opened . . . . How does one deal with identical innovations of great age found disjunct or isolated . . . ?<sup>142</sup>

As in New Mexico, the Spanish adopted long lots on the frontier in Texas to efficiently settle relatively large numbers of people after having sustained contact with the French. Terry Jordan described the earliest long lots in San Antonio. He found these to be first surveyed and utilized in 1731, but he concluded that these long lots resulted from independent invention prompted by the peculiarities of the environment. A new examination of the earliest settlement history of the Spanish in Texas suggests a possible French influence on the landscape in San Antonio. This chapter describes an avenue of diffusion between the French and Spanish that potentially explains the emergence of long lots, and it revisits Jordan’s conclusions about the earliest long lot in Texas.

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<sup>142</sup> Butzer, “French Wetland Agriculture in Atlantic Canada and Its European Roots,” p. 465.

## **The Origin of French Influence in Texas, 1690-1721**

The La Salle expedition and the capture of survivors affected the Spanish profoundly. Through their use of missions, presidios, and finally direct colonization with civil communities, Spain initiated its occupation of Texas to prevent further French encroachment. A sputtering Spanish presence in largely unofficial form existed continuously from 1690-1721. Following 1721, Spanish officials established themselves with authority. Only after 1721 did the Spanish need or use long lots in Texas.

The first Spanish attempts to secure Texas relied on the mission system and Indian allies to repel the French. The missionaries introduced epidemic disease that decimated the native population. The Tejas soon considered the priests poor friends, and expelled most of the Spanish in 1693, but at least four remained with the Indians. A few Frenchmen from the La Salle expedition may have remained at this time as well.

Spain's second effort to secure Texas utilized both missions and presidios manned by something resembling citizen soldiers. This thrust founded a mission at Nacogdoches in 1716, the presidio and associated mission at Los Adaes in 1717, and a presidio and mission which became the permanent colony of San Antonio in 1718. In 1719, imperial struggles in Europe led to a

small skirmish in East Texas which gave most of the priests and disgruntled soldiers an excuse to retreat to San Antonio--a location west of the humidity and pine forests which they found to be more favorable.

In 1721, the Marquis de Aguayo returned to Texas with a substantial Spanish force and established a presence that remained. About 500 well-equipped colonists and citizen soldiers entered Texas with thousands of horses, cattle, and other farm animals. They occupied abandoned ranchos in the region where epidemic had decimated the population of the Tejas Indians and claimed the irrigable valleys around San Antonio. In 1722, Aguayo returned to Mexico to report that Texas had been secured from the French. In the process he actually created the conditions in Texas necessary for economic and cultural exchange between the French and Spanish that continued and grew.<sup>143</sup> Thus, French-Spanish contact resulted from the reaction to the La Salle expedition in both New Mexico and Texas.

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<sup>143</sup> Kessell, *Spain in the Southwest*, pp. 170-174, 205-208, 216-217. Louis Raphael Nardini, *No Man's Land; A History of El Camino Real*, Gretna, Louisiana: Pelican Publishing Co., 1998, pp. 7-32. Numerous works tell the early history of Texas. Kessell's broad narrative and Nardini's regional scholarship are among the interesting descriptions of the period 1682-1722.

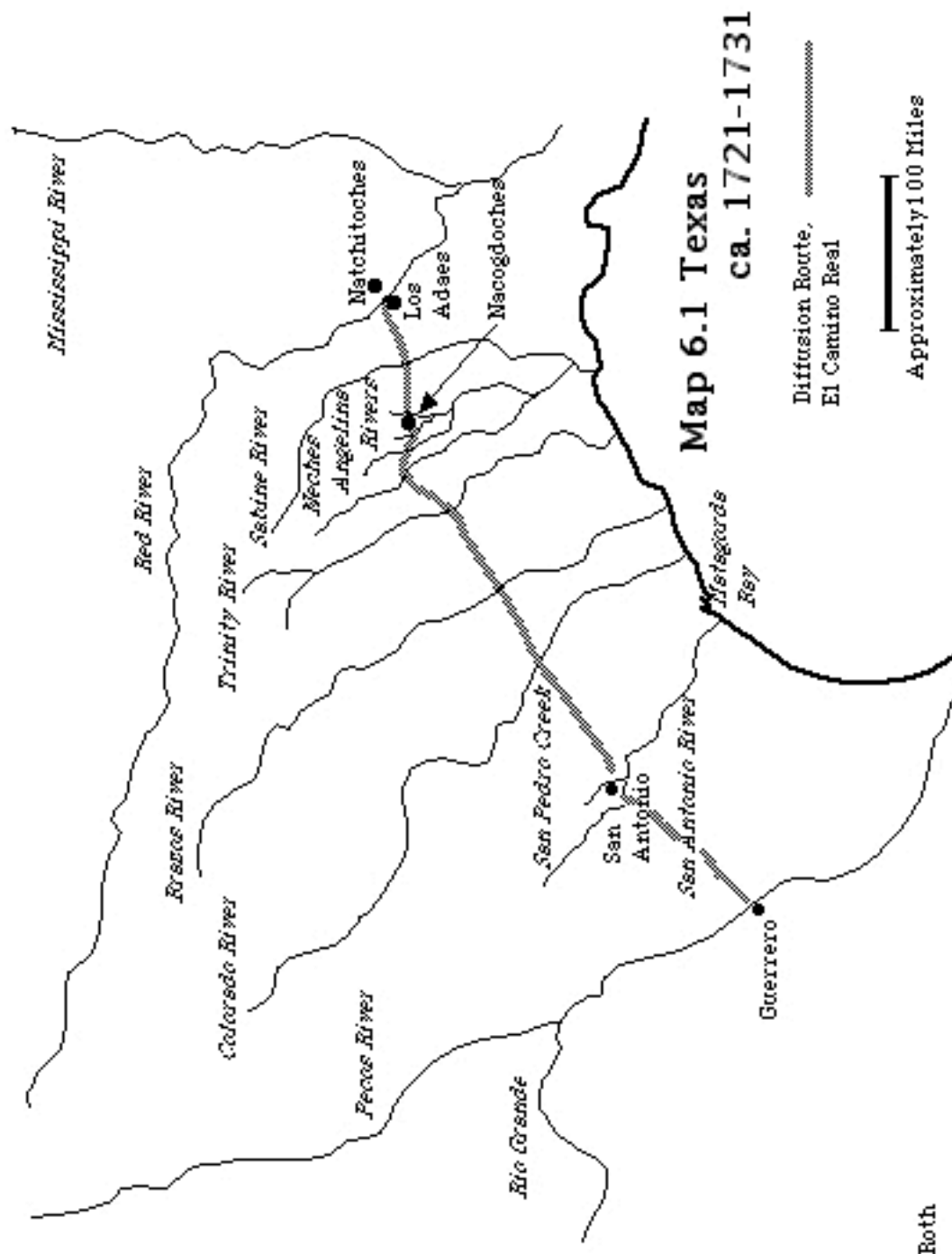
## The French-Spanish East-West Connection

After 1721, significant numbers of Spanish settlers, soldiers, and government officials rotated to and from Los Adaes during the period between 1721 and the arrival of the Canary Islander settlers in 1731 (Map 6.1). The Spanish on the frontier witnessed how the French lived, knew them personally, and they reported on what they saw to the viceroy, Marques de Casafuerte Juan de Acuna in Mexico. The viceroy learned from his frontier subordinates and planned for the Islanders for almost a decade before issuing the orders for their settlement in San Antonio.

While the viceroy and others planned for the occupation of Texas during the early eighteenth century, Natchitoches emerged as a gateway between New France and Texas. As early as 1700, the explorer who would become one of the most important figures in Louisiana, Jouchareu de St. Denis established ties with the Natchitoches Indians as he started his travels into Texas and Mexico. The French trickled into Louisiana and blended with the Spanish on the frontier.<sup>144</sup> Maps 6.2 and 6.3 show the results as of about 1722. In these maps, the French cartographer J. F. Breutin portrays the region of French and Spanish contact and provides a detail of the close proximity of the French to the Spanish.

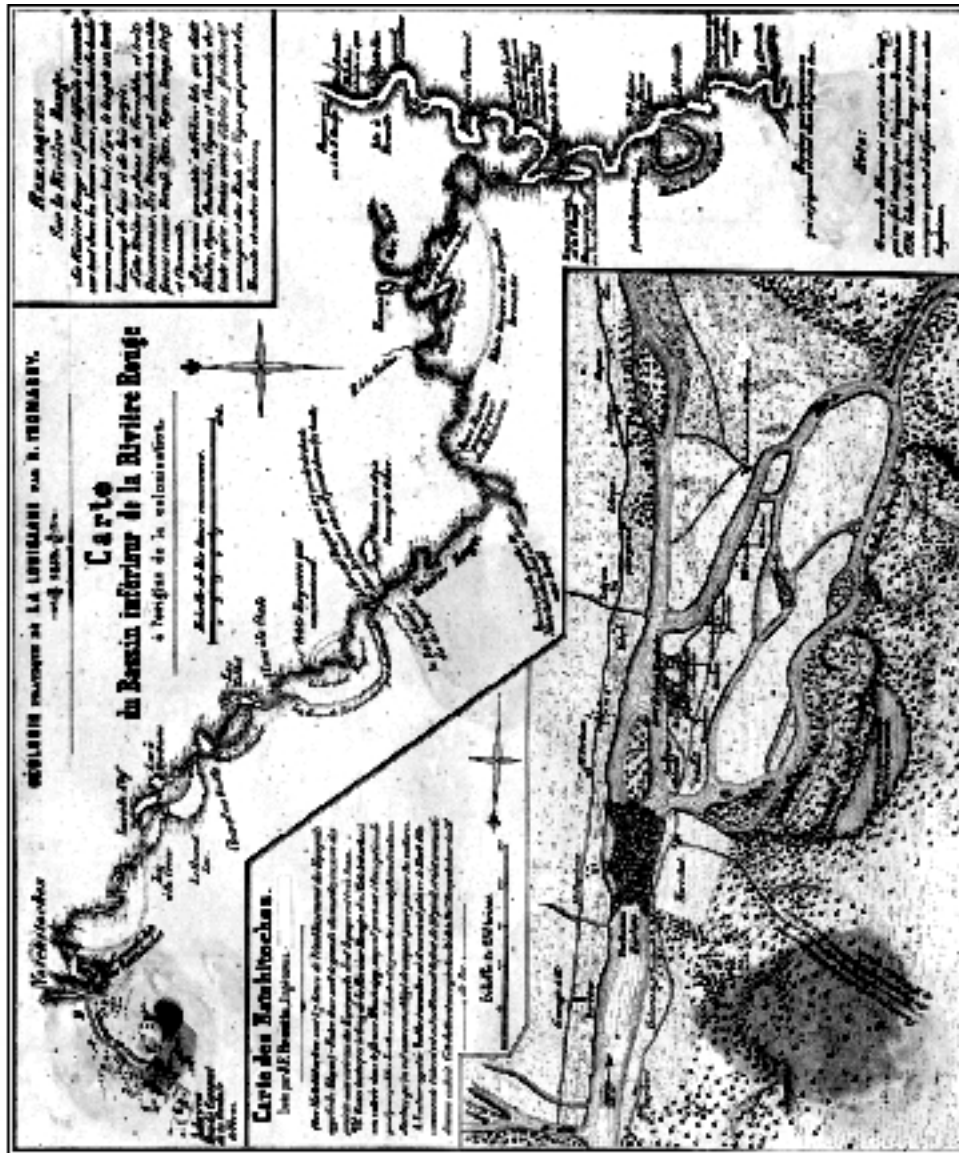
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<sup>144</sup> Noel Loomis and Abraham Nasatir, *Pedro Vial and the Roads to Santa Fe*, Norman: University of Oklahoma Press, 1967, pp. 36, 38-39. Hereafter cited as Loomis and Nasatir, *Roads to Santa Fe*.





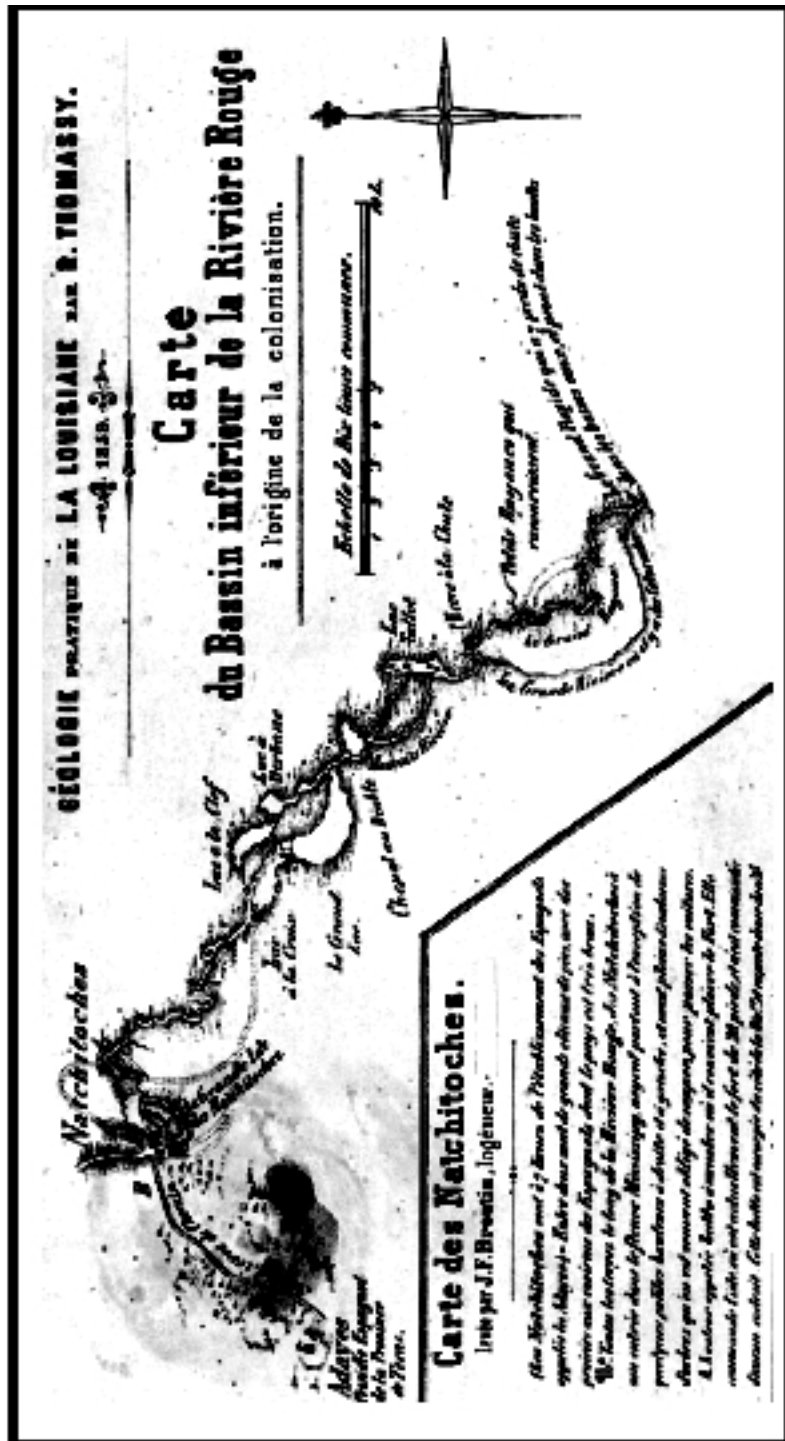
Map 6.2 Natchitoches and Red River Basin, Breutin, 1722



Courtesy of Northwestern State University of Louisiana, Watson Memorial Library,  
Cammie G. Henry Research Center, Natchitoches, Louisiana



## The Close Proximity of the French and Spanish



Courtesy of Northwestern State University of Louisiana, Watson Memorial Library,  
Cammie G. Henry Research Center, Natchitoches, Louisiana

After more than a decade of exploration and trade, Louis Jouchareu de St. Denis married the daughter of a Spanish official, and afterward the French and Spanish mixed freely. In Natchitoches, the French constructed row villages on long lots fronting rivers and roads. Breutin's 1722 map records the location of the farms (Map 6.4). Early land records clearly demonstrate the use of long lots in Natchitoches from the earliest period (Map 6.5).<sup>145</sup>

After arriving at Natchitoches, the French expanded westward. As time passed French traders and settlers interacted with Spaniards in Texas, often at the invitation of Spanish officials.<sup>146</sup> Kessel described one such overture and how the Spaniard sought out the Frenchmen with "uncharacteristic bravado."<sup>147</sup> By 1722, a substantial force of citizen-soldiers and missionaries, led by Marques de San Miguel de Aguayo, moved into the neighborhood of the Adaes Indians and established a presence in close proximity to the French.

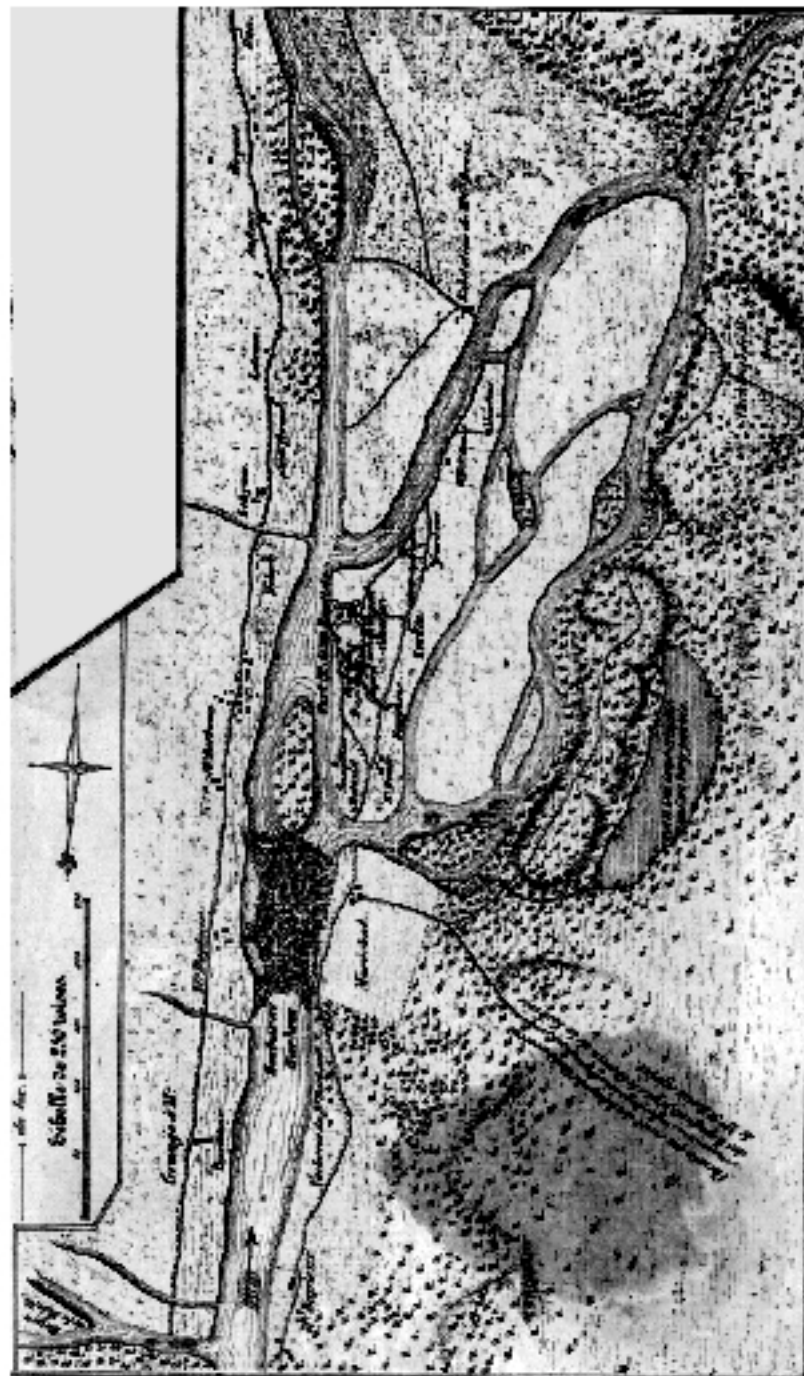
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<sup>145</sup> Breutin, 1722 or 1732 as reproduced in Louis Raphael Nardini, Sr., *My Historic Natchitoches, Louisiana and Its Environment*, Nardini Publishing Co., Colfax La., 1963, p. 53. Nardini indicates the map was produced in 1722 but other sources offer the 1732 date.

<sup>146</sup> La Harpe to De Alarconne, July 8, 1719, as translated in R. B. Blake "Research Collection," SFASU, Nacogdoches, Texas, Vol. 67, pp. 277-281. Hereafter cited as R.B. Blake, vol. Nardini, *My Historic Natchitoches*, p. 33. Nardini quotes as his source Bernard La Harp, "Mississippi Provincial Archives," 1701-1729, p. 254.

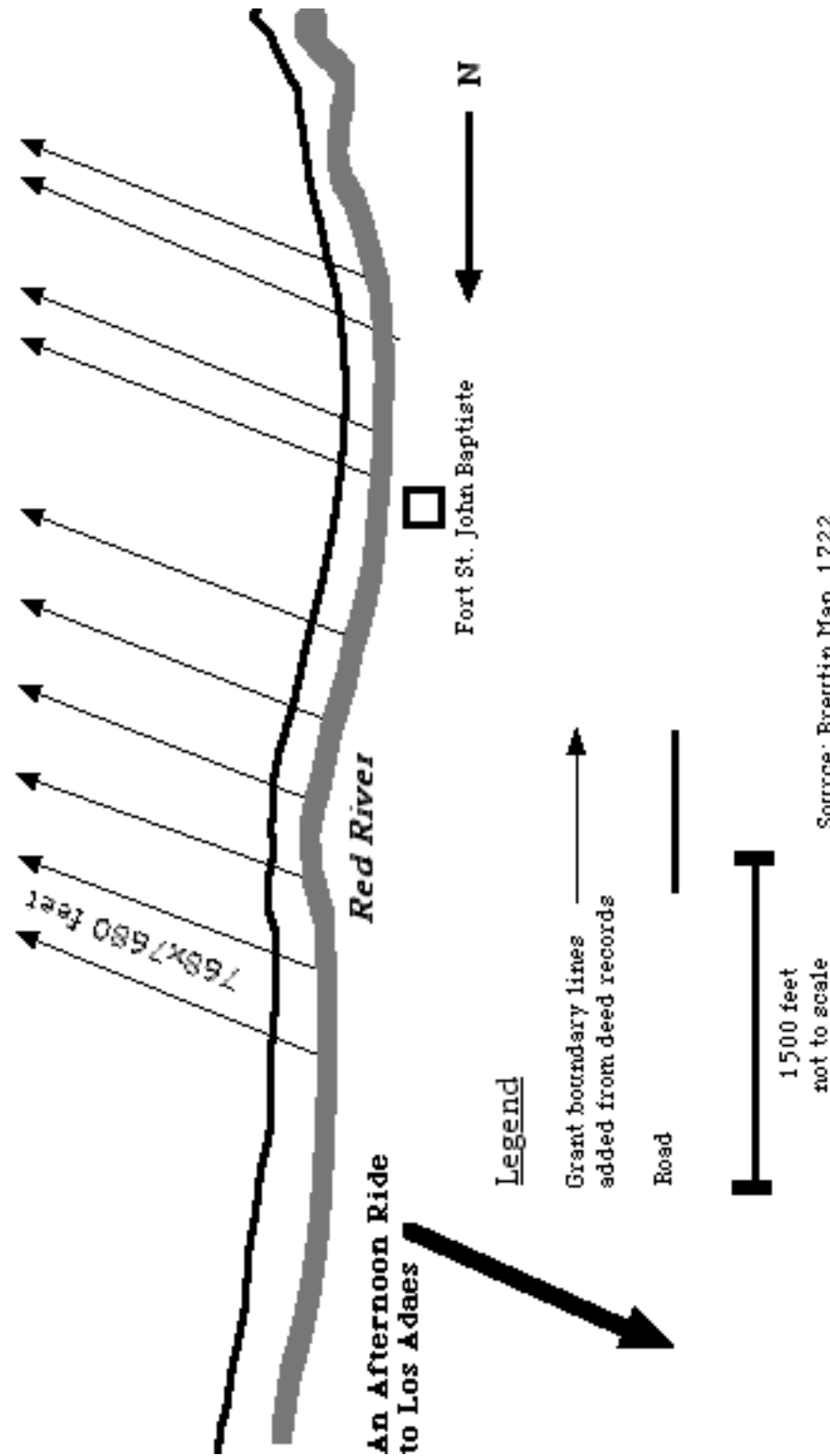
<sup>147</sup> Kessel, *Spain in the Southwest*, p. 205.

Map 6.4 Detail of Natchitoches, from the Breutin Map of 1722



Courtesy of Northwestern State University of Louisiana, Watson Memorial Library,  
Cammie G. Henry Research Center, Natchitoches, Louisiana

**Map 6.5 Natchitoches Long Lots during the 1720s**



Source: Breutin Map, 1722.  
 Natchitoches Deed Records, 1723,  
 as reproduced and translated in Nardini,  
*My Historic Natchitoches*, pp. 39, 53. Roth

Map 6.6, drawn in about 1722 by Aguayo's cartographer Juan de la Pena, shows the Spanish settlement of Los Adaes and the road to Natchitoches. In addition it demonstrates the use of traditionally-shaped farm plots discussed later in this chapter. In 1721, about 200 Spaniards remained in East Texas, and others returned to the San Antonio area.<sup>148</sup> When Aguayo formed the expedition to restore the Spanish presence in East Texas, he made Don Fernando Perez de Almazan his Lieutenant Governor. Almazan subsequently became governor when Aguayo returned to Mexico and retired from active service.

Upon arrival in East Texas, Aguayo and Almazan made contact with St. Denis. Afterward, they routinely toured the village of Natchitoches, making close observation of what the French had constructed and why. As they repeatedly visited Natchitoches, the Spanish leadership observed farm operations in the French settlement, and they returned with knowledge gained from their neighbors.<sup>149</sup> Aguayo departed the frontier in 1722 with plans to secure Texas with colonists and civil settlements; however, the manner of distributing farm plots to the colonists was not clearly stipulated by Spanish law or tradition unless they somehow learned

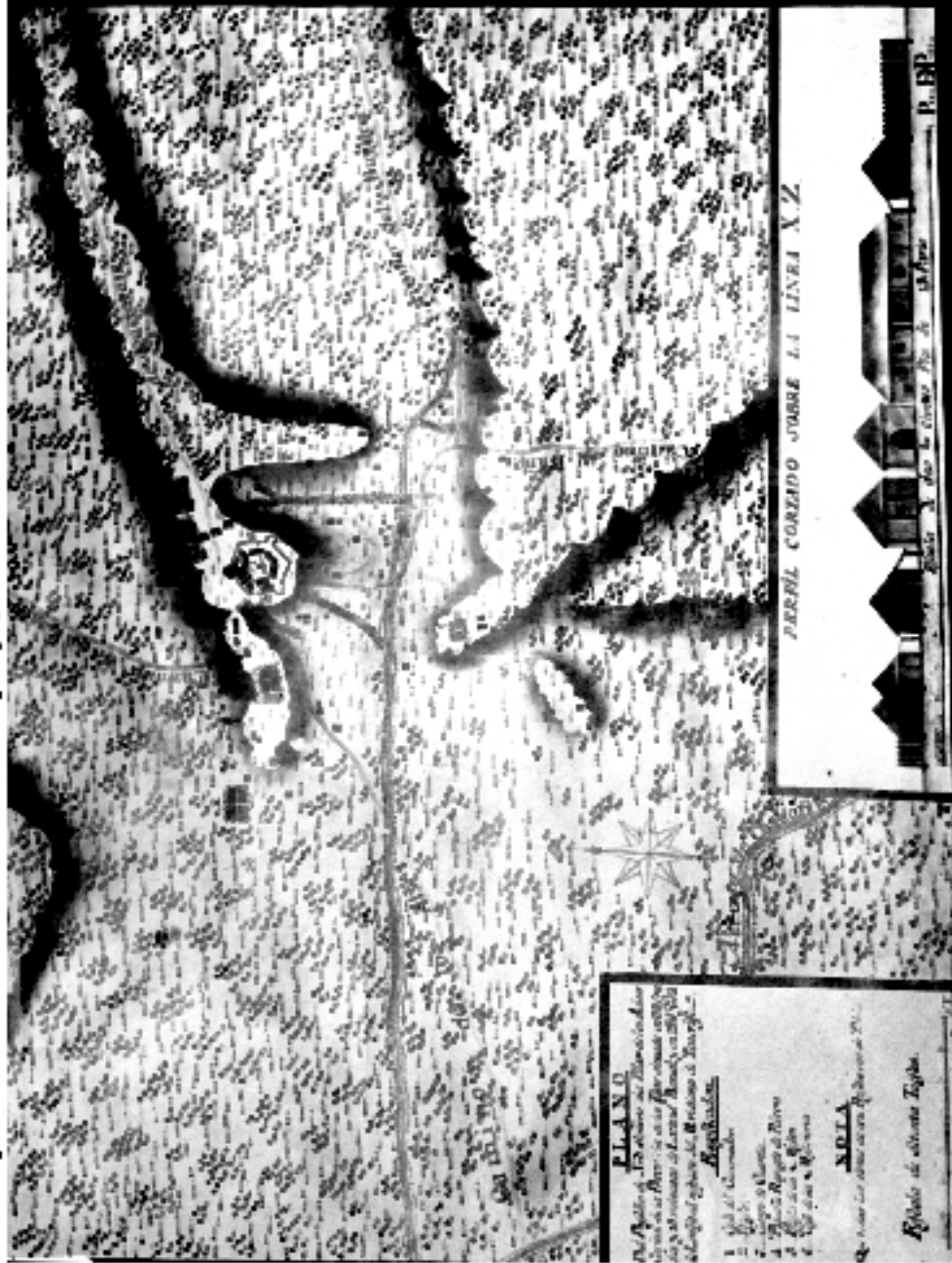
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<sup>148</sup> Juan de la Pena, *Derrotero de la Expedicion en la Provincia de los Texas*, Mexico: 1722. Several different translations of this volume exist.

<sup>149</sup> Jordan, "Long Lots in Texas", p. 82. Jordan describes the type of survey used by the French in Louisiana as the *Flusshufen* system.



Map 6.6 Los Adaes, Map by Juan de la Pena, 1722



Courtesy of Northwestern State University of Louisiana, Watson Memorial Library. Cammie G. Henry  
Research Center, Natchitoches, Louisiana

of the long-lot-system in New Mexico.

Upon leaving the frontier, Aguayo reportedly believed there was no one better than Almazan to continue the “reorganization” of Texas through the development of civil communities to be populated through large scale immigration. In addition, he described Almazan as from a good family, well experienced with demonstrated abilities, and as one particularly well suited to be governor. After leaving Almazan in charge, Aguayo returned to Mexico and retired from active service, but apparently continued to advise the viceroy.<sup>150</sup>

Records demonstrate that Almazan was well prepared to lay the foundation of a colony. He had worked for Aguayo as a surveyor in Saltillo in 1714.<sup>151</sup> Almazan had been Alcalde Mayor of Saltillo and Parras.<sup>152</sup> In the same cities he served as Juez Comisario by appointment of King Phillip, and he had distributed land.<sup>153</sup>

Almazan had already been working closely with Aguayo for at least

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<sup>150</sup> Phares, *The Governors of Texas*, pp. 15-16. The map Aguayo drew for the viceroy in 1730 is evidence of his continuing service to the viceroy and government.

<sup>151</sup> Richard Santos, *The Aguayo Expedition into Texas, 1721: An Annotated Translation of the Five Versions of the Diary Kept by Br. Juan Antonio de la Pena*, Austin: Jenkins Publishing Company, 1981, pp. 22, 112

<sup>152</sup> Frederick C. Chabot, *With the Makers of San Antonio, Genealogies of the early Latin, and German Families with Occasional Biographies, Each Group being Prefaced with a Brief Historical Sketch and Illustrations*, San Antonio: Privately Published, 1937, p. 138. Hereafter cited as Chabot, *With the Makers of San Antonio*.

<sup>153</sup> Herbert Eugene Bolton, *Guide to the Material for the History of the United States in the Principal Archives of Mexico*, Washington D. C.: Carnegie Institution, 1913, p. 427. Hereafter cited as Bolton, *Guide to the Material for the History of the United States*.

seven years when he became governor of Texas. Almazan took charge, and he continued plans to colonize the region around San Antonio at the same time he apparently opened the border of Texas to French Louisiana.<sup>154</sup>

Kessel describes border conditions:

On the close border between Louisiana and east Texas, meanwhile, Frenchmen and Spaniards all but lived together. Nearly constant exchange, quarrels, and intimacy bound neighboring Los Adaes and Natchitoches, where the irrepressible Louis Juchareu de Saint-Denis still ruled. Without French foodstuffs, the presidial garrison of Nuestra Señora del Pilar los Adaes could not have survived.<sup>155</sup>

Almazan learned almost immediately that the Spanish would be dependent on the French in Natchitoches, and trade opened between the isolated colonies. Initially, the Spanish traded livestock for French goods and grain, but nearly free trade then followed.<sup>156</sup> One regional historian writes:

Officially, Los Adaes prevented contraband trade and infiltration of the French into Texas. Actually, it prevented neither. But it was an important administrative center, and a seat of grave diplomatic meetings . . .<sup>157</sup>

In one such meeting Almazan fixed the international

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<sup>154</sup> Nardini, *No Man's Land, A History of the El Camino Real*, Gretna, La: Pelican Publishing, p. 42. Hereafter cited as Nardini, *No Man's Land*.

<sup>155</sup> Kessel, *Spain in the Southwest*, p. 237.

<sup>156</sup> Phares, *Cavalier in the Wilderness*, pp. 186-187.

<sup>157</sup> Phares, *Cavalier in the Wilderness*, p. 192.



boundary between the French and Spanish at the Rio Hondo, which appeased the Spanish central bureaucracy but never prevented trade, other fraternization, or the French from attending Catholic mass at Los Adaes because Natchitoches had no priest.<sup>158</sup> Deeper ties developed quickly. Families and friendships formed. Almazan reportedly granted land to Frenchmen.<sup>159</sup> Exemplifying the deep ties forged during this period, the Spanish even fought alongside the French in a regional war against the Natchez Indians in 1731, just after Almazan resigned as governor.<sup>160</sup>

At first Almazan governed the Texas colony from Los Adaes, but he moved his administration to San Antonio in 1725. One historian describes the Natchitoches-Adaes frontier in that year:

This was a profitable year for the Natchitoches traders to the Indians and the Spanish. The governor of Los Adais [sic] and the Texas region was lenient with the Spanish who wished to trade with the Frenchmen. He is to be noted as one of the most popular and most loved governors of the Adais-Texas region by the French, the Spanish, and the Indians. Almazan [sic] did more to encourage Spanish settlers to come and settle in the Los Adais area than any other governor who was to hold the same title. He was the first to see that herds of wild Texas cattle were brought into the Natchitoches-Adais area to be sold to the French as trade goods.<sup>161</sup>

By that time, Almazan and others planned for the

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<sup>158</sup> Nardini, *No Man's Land*, p. 42.

<sup>159</sup> Nardini, *No Man's Land*, p. 31

<sup>160</sup> Nardini, *My Historic Natchitoches*, pp. 44-46.

<sup>161</sup> Nardini, *My Historic Natchitoches*, p. 43.

forthcoming colonization of San Antonio, and a large number of European Spaniards they expected to immigrate. Could they have considered French methods during this planning process as the way to distribute land to the colonists? Aguayo had been exposed to long lots and may well have spoken of them when he advised the Viceroy. The former surveyor Almazan, who observed the use of both long lots and irregular surveys, returned to Mexico some time after 1727, and may have reported on the advantages of long lots as a method for settling colonists to the Viceroy. Don Fernando Perez de Almazan disappears at the end of the 1720s. There are also various dates reported for the end of his governorship. Reportedly, he was in San Antonio around 1727, and in Mexico in 1729. The viceroy did not appoint another governor to Texas until 1731. Perhaps, Almazan returned to Texas, or he may have remained in Mexico. Even the date of his death is unknown.<sup>162</sup>

Between 1721 and 1731, evidence demonstrates that a substantial relationship existed between the French and Spanish in trade and through necessity. Human relationships and institutions revolving around church and family cemented ties. French ideas spread west from Natchitoches. Spanish ideas also moved east

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<sup>162</sup> Phares, *The Governors of Texas*, pp. 16-17. Other sources offer no help for the last years of Almazan's tenure.

from Guerrero (Map 6.1) referred to as the “gateway to Texas.”<sup>163</sup> Cultures mixed and genealogists have documented numerous Spaniards early in the colonial period in Louisiana. Along with elements of Spanish ranching culture that began moving east with Almazan’s delivery of cattle to the French, a regional historian relates how the Spanish introduced the hot pepper into Louisiana cuisine during the 1720s. Local Indians who ate the chiles thought they were being poisoned. The Spanish were almost killed for their fiery gift to the Indians, but St. Denis intervened.<sup>164</sup> The diffusion of multiple ideas can be demonstrated, and the long lot was likely among these.

### Long Lots and Islenos at San Antonio

Through this formative period Almazan demonstrated his competence in administering the affairs of Texas. He supervised the construction of the San Miguel, Ais, and Nacogdoches missions. He also solved administrative problems at La Bahia and surveyed a better location for this post.<sup>165</sup> Importantly, during his tenure Almazan initiated construction of the acequia on which Canarian

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<sup>163</sup> Patricia R. Lemee, “Tios and Tantes: Familial and Political Relationships of Natchitoches and the Spanish Colonial Frontier,” *Southwestern Historical Quarterly*, Vol. 101, No. 3, p. 341. Hereafter cited as Lemee, “Tios and Tantes: Familial and Political Relationships of Natchitoches and the Spanish Colonial Frontier.”

<sup>164</sup> Nardini, *My Historic Natchitoches*, p. 38.

<sup>165</sup> Chabot, *With the Makers of San Antonio*, p. 138.

colonists later settled.<sup>166</sup> In one of the few descriptions of early settlement around San Antonio, a bitter priest described the 1731 intrusion of Canary Island settlers on land ordered prepared for settlement by Almazan:

. . . They enjoy the privilege of the water rights that others prepared, the many lands cleared which had been cultivated already for planting corn, and many houses on plots of ground where they are now established . . . where for many years there had been the houses of the settlers and the soldiers.<sup>167</sup>

In their complaints, the priests ignored their own failures to secure Texas with the mission system--failures that had prompted the new plan for civil institutions and the Canarian colonists.

Describing the Spanish plan initiated by Almazan during the 1720s, historian Kessel writes:

Proposals and counterproposals, meantime, echoed between Madrid and Mexico City. One called for four hundred families from Spain and the Canary Islands to people . . . towns in Texas. After years of argument, the paltry result amounted to no more than fifteen or sixteen families . . . . Some fifty-five exhausted *islenos* finally crowded into San Antonio . . . .<sup>168</sup>

Even though few Canary Islanders arrived, the Spanish had anticipated a larger number of immigrants in Texas. They used

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<sup>166</sup> Chabot, *With the Makers of San Antonio*, p. 140.

<sup>167</sup> Father Benedict Leutenegger *Letters and Memorials of the Father Presidente Fray Benito Fernandez de Santa Anna, 1736-1754* Documentary Series No. 6, San Antonio: Old Spanish Missions Historical Research Library, 1981.

<sup>168</sup> Kessel, *Spain in the Southwest*, p. 225.

long lots to accommodate the expected larger numbers. As in New Mexico, the Spanish in Texas had a problem with equitable division of farm land around San Antonio; however, as historian Thomas Glick pointed out that the Spanish had ancient traditions established for distributing irrigation water equally which they used.<sup>169</sup> In 1730, Aguayo apparently mapped San Antonio for the viceroy. It portrayed farm plots resembling long lots. Aguayo labeled these “tierras de lavores” (working fields) to be used for corn, wheat and beans (Map 6.7). According to plans initiated by Aguayo, supported by Almazan, and ordered by the viceroy, the Canary Islanders arrived and settled on long lots in 1731.<sup>170</sup>

Mattie Austin translated the viceroy’s 1731 order to the new Texas Governor, Juan Antonio Bustillo Zevallos, as follows:

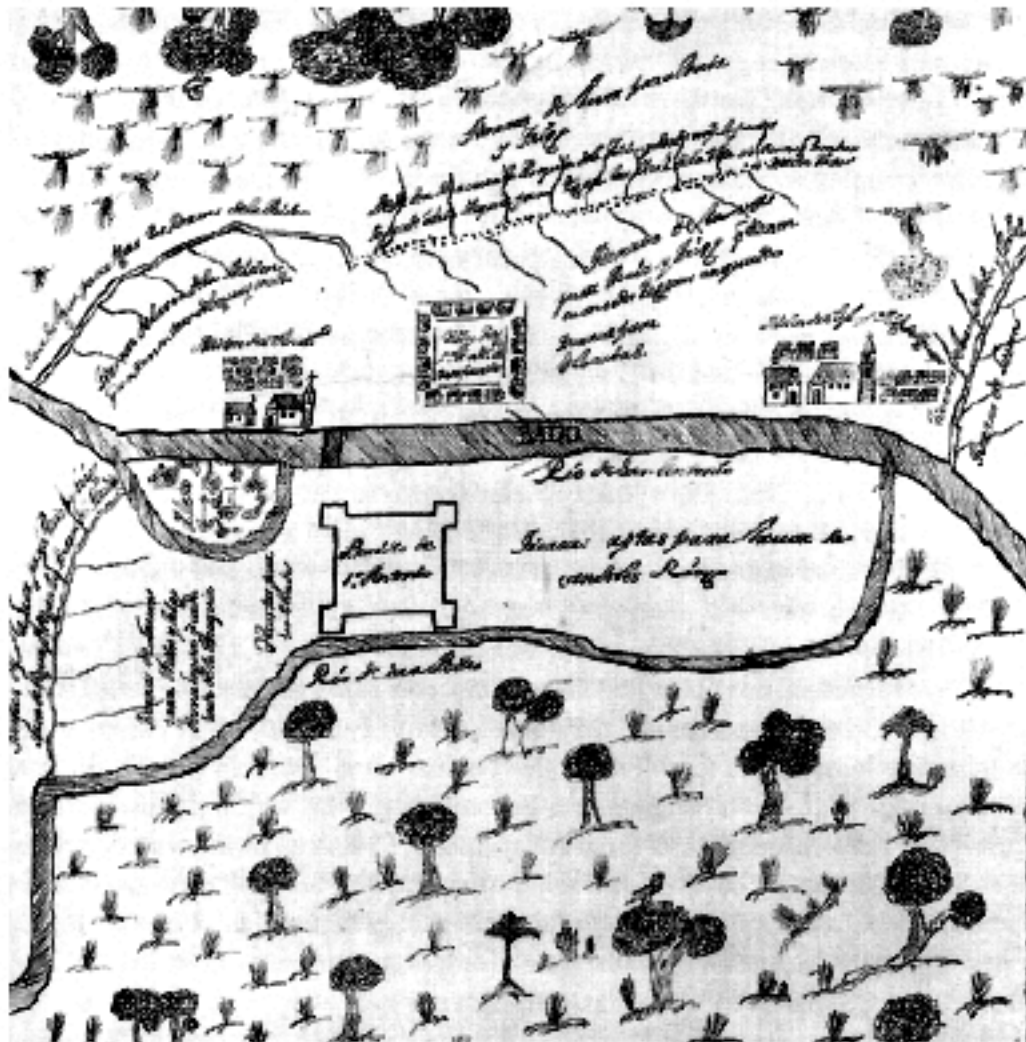
From the boundaries of this square he shall begin another measurement, and mark off two thousand one hundred and eighty-six *varas* in each direction as above mentioned. All the land within this square he shall set apart for farms; and, having reserved one fifth for town

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<sup>169</sup> Glick, *The Old World Background of the Irrigation System of San Antonio, Texas*.

<sup>170</sup> Jordan, “Antecedents of the Long-lot in Texas,” pp. 71-72. There is no complete source on Almazan’s tenure. Moreover the multiple sources that exist which discuss elements of Almazan’s career differ in details including his terminal date in Texas. The information from this paragraph was gleaned from multiple sources. “Bonilla’s Brief Compendium” *The Southwestern Historical Quarterly* v. 8; Eleanor Claire Buckley, “The Aguayo Expedition Into Louisiana and Texas,” *Texas Historical Quarterly*, vol. 15, pp. 3-63. Mattie Alice Austin, “The Municipal Government of San Fernando de Bexar, 1730-1800,” *Quarterly, Texas State Historical Association*, Vol. 8, No. 4, pp. 276-352. Hereafter cited as M.A. Austin, “The Municipal Government of San Fernando de Bexar, 1730-1800.” Bolton, *Guide to the Material for the History of the United States*, p. 427.

Map 6.7 Aguayo's Map of San Antonio  
Depicting Long Lots, 1730



Long Lots seem to appear as irregular lines from rivers and irrigation works.

Reproduced from Weber, *The Spanish Frontier in North America*,  
from the copy at Institute for Texan Culture, San Antonio

lands, he shall give the remainder to the fifteen families assigning to each the tract which it should have for its farm . . .

To each of these fifteen families he shall give possession of the tract of land assigned it, and title to the enjoyment of the possession of the same in the name of his Majesty, and by virtue of the *Recopilacion de Indias* charging each family to plant trees on the boundaries of its tract of land, and make use of the waters of the above mentioned *Arroyo*, and of the San Antonio River.

Importantly, the Viceroy gave the following orders that allowed for the long lot innovation. Austin continued:

The governor must remember that, in this division, he shall apportion the tracts of land and the water equally among all the families, and that if, in any of the directions he can not make any one or any number of the squares, on account of the land being occupied, he shall make them in the other directions . . .<sup>171</sup>

The new governor, Bustillo, who had been in Texas serving as the commandant of La Bahia since at least 1725, was reportedly becoming “best friends” with St. Denis in Los Adaes when the Canary Islanders arrived.<sup>172</sup> In 1731, Juan Antonio Perez de Almazan, the ranking official in San Antonio when the Islanders arrived, placed fields laid out in a French-like manner into the possession of colonists. Perez reported he had granted available

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<sup>171</sup> M.A. Austin, “The Municipal Government of San Fernando de Bexar, 1730-1800,” pp. 342-343.

<sup>172</sup> Phares, *The Governors of Texas*, pp. 17-19.

agricultural land to the sixteen islander families “in conformity with the order . . . relating to the partition and distribution of irrigable and arable lands.”<sup>173</sup> He continued:

. . . there are not to be found any other arable lands than those situated between the San Antonio River and San Pedro Creek . . . and according to said distribution there was allotted to each one of said sixteen families one “suerte”, or lot of land, hundred and five varas wide, making fifty-two and a half “brazas” (the usual measure in their islands) and in length the distance from the San Pedro Creek to the San Antonio River . .

<sup>174</sup>  
..

Juan Antonio Perez de Almazan appears only briefly in the historical record during the 1730s, and other information about him is unknown. His relationship to Governor Perez de Almazan is unknown.

Perez reported that he was following orders when the land was divided in an unusual way, and the historical record verifies an earlier French connection. The viceroy’s orders allowed for innovation. One likely source for these orders would have been advice received from the former surveyor Almazan along with Aguayo (and perhaps others from New Mexico or elsewhere who remain concealed by history) and the land was issued in a French-like pattern. Long lots seemingly appear on Aguayo’s 1730 map

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<sup>173</sup> Austin, “The Municipal Government of San Fernando de Bexar, 1730-1800,” p. 344.

<sup>174</sup> Austin, “The Municipal Government of San Fernando de Bexar, 1730-1800,” pp. 344-345.



which passed through the viceroy's hands on the way to Juan Antonio Perez de Almazan.

Aguayo's map shows how the Spaniards combined the long lot with the more traditional plaza and grid called for specifically by the viceroy. When finally settled, the Islanders had houses on the plaza and disjunct pieces of grazing land, as well as long-lot plots similar to those in Natchitoches. Importantly, Aguayo showed farm plots on his map within a land division scheme that suggested a planned use of long lots which would eliminate Captain Perez de Almazan as the source. Aguayo probably drew this map for the viceroy in order to assist in planning San Antonio's growth.

Aguayo's 1730 map, which Bolton found within the Canary Island Settlement Record Group in Mexico, seemingly portrays a long-lot land division scheme.<sup>175</sup> Aguayo pictured the long lots on this map just the way the early deed records in New Mexico often portrayed them, with specific widths and undefined lengths (Map 6.8). This detail of the hydrology and land division shown by Aguayo suggests that he thought long lots should be used in San Antonio's colonization.

Throughout the decade of planning for settlement Spanish officials had direct contact with the French. After being influenced

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<sup>175</sup> Bolton, *Guide to the Material for the History of the United States*, p. 132.

Sketch of a landscape with a river and mountains. The river flows from the top left, through a series of loops, and exits at the bottom left. Mountains are sketched in the background with handwritten labels. A small inset at the bottom shows a detail of a mountain slope.

Labels in the sketch include:

- Mountains to the North
- Mountains to the South
- Mountains to the East
- Mountains to the West
- Mountains to the North
- Mountains to the South
- Mountains to the East
- Mountains to the West



by the French, the governors and others who served in East Texas reported to the viceroy. It is clear that after receiving reports about the conditions around San Antonio, the viceroy issued orders modifying elements of settlement dictated by the Laws of the Indies, including the formation of a villa in close proximity to existing missions and old settlers. In addition, the viceroy issued unusual instructions for the distribution of farm lands to the local granting authorities.<sup>176</sup>

I theorize that Aguayo, Governor Almazan, and perhaps others with frontier experience in close contact with the French, advised and influenced the viceroy on the settlement of the Canary Islanders during a ten year period. The viceroy apparently sent Aguayo's sketch map with the other instructions to San Antonio. The instructions accompanied by Aguayo's map seem to show the planned use of long lots that were distributed by Juan Antonio Perez de Almazan. He too had probably seen a long-lot settlement because Spanish officers routinely traveled between San Antonio and Natchitoches. Both colonies had similar problems associated with accommodating growth, and the leaders often helped each other.

By 1731, the Spanish around San Antonio adopted the long

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<sup>176</sup> Austin, "The Municipal Government of San Fernando de Bexar, 1730-1800," p. 301.

lot, and continued to use it to divide and distribute agricultural land to grantees.<sup>177</sup> Initially, the Canary Islanders did not build houses on their property because they were given lots on the plaza befitting their status of being first families in the villa. In addition, there was less need to live in a line village pattern on their individual farm plots than as had been the case in New Mexico where fields were threatened by nomadic Indians. Raids by Indians in San Antonio were not a factor at that time.

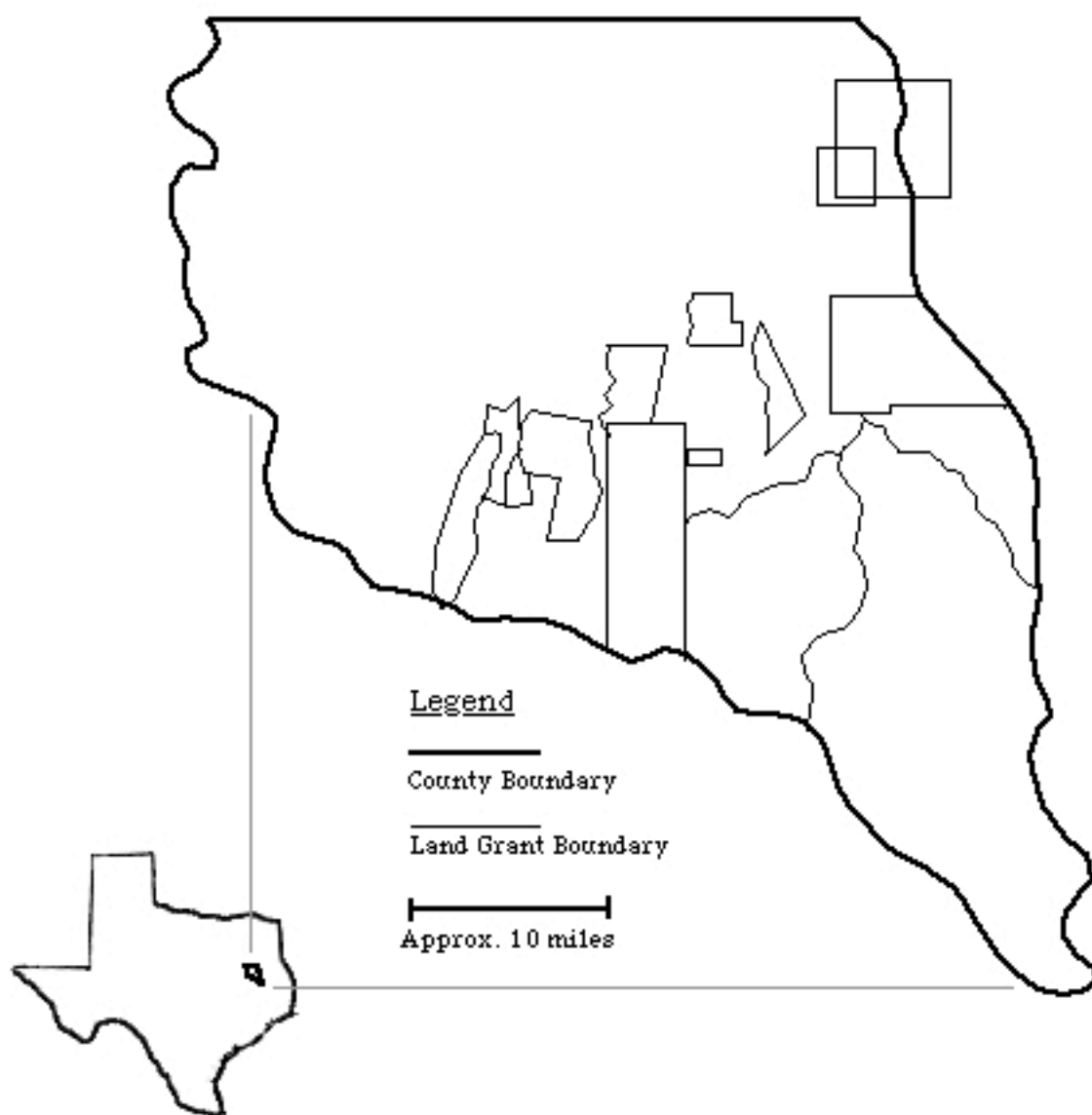
Very little official colonization occurred during the Spanish period--other than at San Antonio, where many hoped for mass colonization--so the long-lot pattern was largely isolated in that vicinity. Other colonial efforts utilized large irregular, or one by two dimensional surveys for the immense *sitio de ganado mayor* or *sitio de ganado menor* with dimensions measured in leagues rather than varas.<sup>178</sup> Within these very large grants, agricultural field patterns were irregular. So, the Spanish continued using more traditional methods where no French influence existed or in areas lacking a stimulus to change. Around Nacogdoches, where the Spanish arrived gradually for example, the colonist would first have to physically occupy land in order to be considered for a grant.

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<sup>177</sup> Jordan, "Antecedents of the Long-Lot in Texas," p. 71.

<sup>178</sup> Felix D. Almaraz, *The San Antonio Missions and their System of Land Tenure*, Austin: The University of Texas Press, 1989, p. 14. Jordan, "Antecedents of the Long-Lot in Texas," p. 74, 76.

**Map 6.9 Irregularly-shaped, Traditional  
Spanish Land Grants in  
Nacogdoches County, Texas, 1792-1810**



Roth, Source: Map of Nacogdoches County, TGLO, 1858.

They would then petition a local official to accompany them to the property in order to convey ownership of the land. The government official and prospective owner would walk along the boundary of the parcel while marking trees and placing piles of rocks in addition to other less than perfect methods of delimitation on large parcels. Sometimes these boundaries were recorded in written grants (map 6.9). Many were also verbally conveyed and subsequently a problem for the East Texas settlers.

The chaos caused by a large group of colonists randomly dispersing onto unfamiliar lands would have been great. Without a plan, the sixteen Canary Islander families would certainly have created a burden on the government and people of San Antonio. Planned settlement of colonists required the official consideration of fair access to necessary resources--this led to long lots in San Antonio. In East Texas by contrast where there were no early long lots, no official colonization occurred, and there, citizen soldiers dispersed into the forests and occupied old fields along transportation routes. After years of possessing lands granted locally and verbally, some were given official status after 1792. Map 6.9 shows Nacogdoches county and all land grants recorded during the Spanish period. It portrays only the large irregular land grants deeded from 1792-1810, on which appeared dispersed

ranchos with irregular farm plots. While no maps of field patterns in Nacogdoches county exist, Map 6.10 shows irregularly situated fields around Los Adaes.

Spanish officials who had been influenced by the French were responsible for the colonization program that resulted in the first long lots of San Antonio. Even after Jordan proposed just that--the Texas long lot originated because of French influence from the east--he gave credit for the invention to Captain Perez de Almazan who said in his report that he had distributed the land according to orders. Jordan concluded:

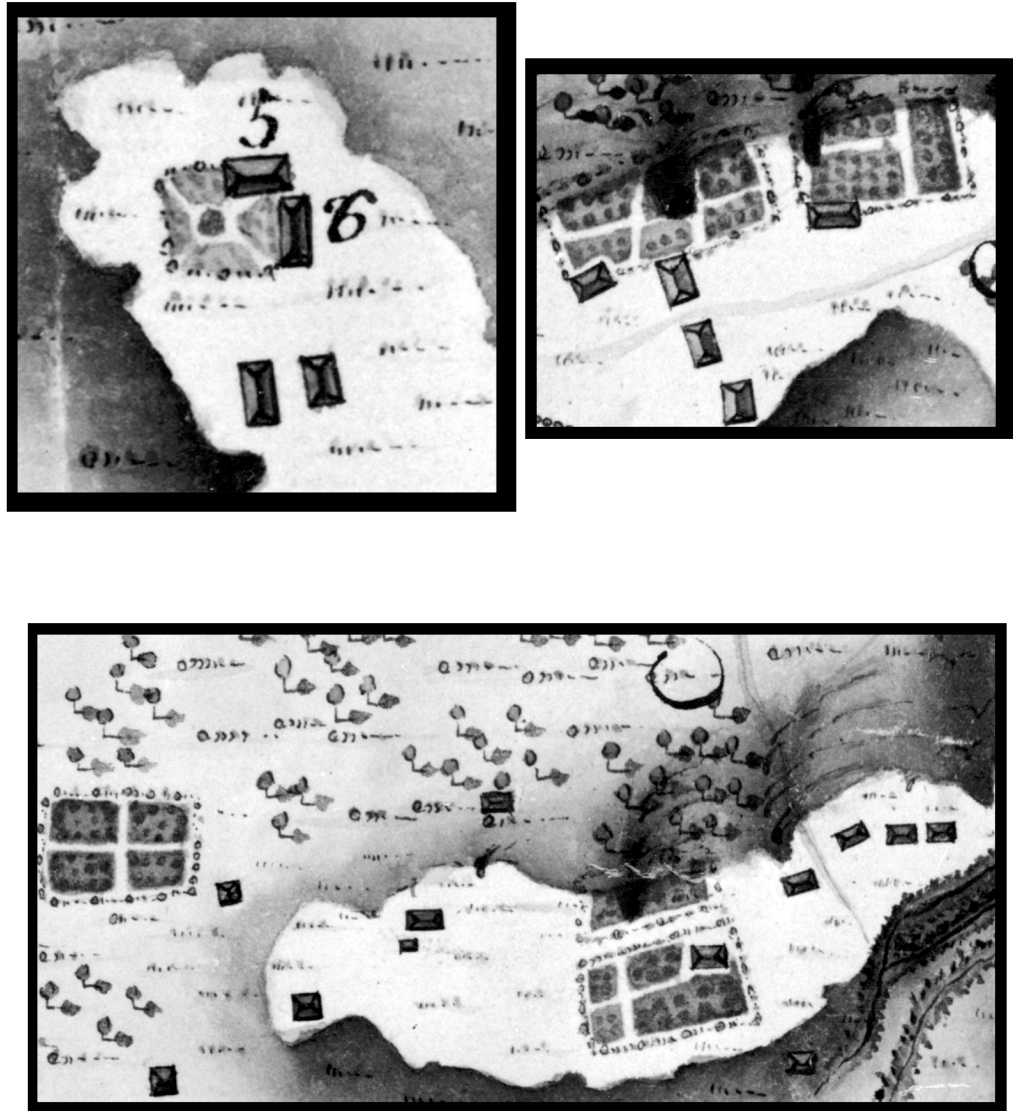
It seems likely to me that the San Antonio long-lot *suertes* of 1731 were not diffused from Louisiana, but were an independent invention, prompted by the peculiarities of the local environment. . .<sup>179</sup>

Jordan explained that he thought the San Antonio long lots were independently invented because they deviated from the French form in two ways. First, the settlers' homes were on a plaza and not adjacent to the fields. As noted above, the Islanders were given lots on the plaza by order of the King, and they lived there because doing so conveyed status. Secondly, the lots stretched between two rivers with the irrigation ditch bisecting the lots on the divide between the two rivers. However, the reason why the Spanish adopted long lots in San Antonio resembled the reason why

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<sup>179</sup> Jordan, "Antecedents of the Long-Lot in Texas," p. 82

Map 6.10 Details of Irregularly-Shaped Agricultural Plots  
Los Adaes, De La Pena, 1722



Courtesy of Northwestern State University of Louisiana, Watson Memorial Library.  
Cammie G. Henry Research Center, Natchitoches, Louisiana



the French used them. This fundamental reason was access to a resource. Both required an efficient method for distributing land to multiple colonists which provided equitable access to an indispensable resource--water. In fact, like the French, the lots widths actually were measured along only one water course, in 105 vara increments, and stretched in long ribbons between two physical boundaries used for convenience. This seems to have been pictured on Aguayo's map rendered imperfectly from his memory, and was apparently prompted by the cultural influence that Jordan underestimated.<sup>180</sup> The French long lot seems to have blended with elements of the traditional Spanish system of colonial administration in the same way that the hot peppers introduced by the Spanish at Natchitoches blended with French-Louisiana cuisine.

Aguayo and Almazan clearly had contact with the French. The historical record for their tenure is incomplete, but if further documentation is discovered, it would quite likely reveal a greater French connection with Texas. So a more plausible explanation for the origin of long lots is diffusion of the French idea to local officials who adapted it to their needs.

I am gratified to report that Jordan told me he thought that I was moving in the right direction while at the Southwest Association of American Geographers meeting at College Station,

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<sup>180</sup> Jordan, "Antecedents of the Long-Lot in Texas," p. 82

Texas, in 2000. He continued that sentiment in correspondence. Of the French connection in general and diffusion of long lots in particular, he wrote: "I believe you are onto something there." He wrote further: "I wish I could be more informative, but to be honest I have done no subsequent research on long-lots since 1974 and have forgotten most of what I did know."<sup>181</sup>

Thus a review of the historical evidence showing French influence and cultural exchange allows me to imagine Spanish officials, including Aguayo and his surveyor Almazan, riding into the French settlement and observing their village and long lots. Passing through the linear village, they would have looked into the valley at the narrow long fields. The difference between Natchitoches and their own settlement would have been evident.

The two Spanish leaders, one a surveyor and the other a colonial promoter, without support from Spain, would have drawn on all available sources of knowledge including what they observed in Natchitoches. They needed a way to grant farm land to colonists, and because it provided fair access and was easier to use than other methods, they probably suggested the French way to the viceroy. He may never have known he had been influenced by the French when his instructions that deviated from normal Spanish

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<sup>181</sup> Personal Email Correspondence, Jordan-Bychkov to Roth, 2002. Terry Jordan-Bychkov died October, 2003, before a final draft of this dissertation was completed.

methods were bundled up with Aguayo's map, and sent with the Canary Islanders to San Antonio.<sup>182</sup>

In 1731, the Spanish used the long lot in San Antonio, where an equitable way to distribute scarce irrigable land was needed. After that no significant colonization was attempted by the Spanish until late in the eighteenth century. By that time, because the Spanish possessed and governed Louisiana, newly appearing long lots in Texas had a clear French connection.<sup>183</sup> In East Texas agricultural land was well watered, plentiful, and there was no need for long lots during the Spanish era. Nonetheless, the long lot continues to be important in Texas, and there is value in knowing that the French and Spanish cooperated earlier than believed. In addition modern roadways in San Antonio follow the old survey lines, suggesting that current traffic flow follows a pattern diffused from Louisiana.<sup>184</sup> One now knows who to blame and curse--the French--when sitting in a modern San Antonio traffic jam.

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<sup>182</sup> Austin, "Municipal Government of San Fernando de Bexar," p. 301.

<sup>183</sup> Herbert Eugene Bolton, *Athanase de Mezieres and the Louisiana-Texas Frontier 1768-1780*, Vol. 1, pp. 66-85. Jordan, "Antecedents of the Long-Lot in Texas," p. 82.

<sup>184</sup> Jordan, "Antecedents of the Long-Lot in Texas," pp. 84-86.

## **Chapter 7**

### **Conclusions**

Most people pay little attention to ribbon-like long lots as they quickly pass by along a highway. While often ignored, these elongated rectangles of land represent an interesting yet understudied mixing of cultures in North America during the colonial era. When the Spanish formed settlements in New Mexico after 1693, and later at San Antonio in 1731, they divided the land into long lots. Around the long lot a permanent agrarian settlement pattern emerged. This dissertation demonstrates that the French shared ideas which affected the Spanish. That Archibeque, St. Denis, and others like them influenced Spaniards seems indisputable, and circumstantial evidence suggests that one example of this influence was the long lot. This survey and land use system diffused from the French to the Spanish. The diffusion occurred during the 1690s in New Mexico and in a second phase between 1721-1731 in Texas.

#### **Revising the Conclusions of Jordan and Carlson**

Telling evidence suggests that Jordan and Carlson erred on several points regarding the origin and diffusion of long lots. First,

Jordan theorized that independent invention of the system took place around San Antonio in 1731, and he concluded that the long lots distributed there were probably unique in all of New Spain at that time. Carlson apparently found Jordan's conclusions to be accurate and applied them to New Mexico. Carlson determined that in New Mexico the Spanish had invented long lots locally and independently during the mid-1700s. For New Mexico, the social innovation represented by long lots has been missed because Carlson hypothesized that long lots were independently invented and first used sixty years after the Reconquest.<sup>185</sup>

My review of the documents suggests that Vargas reformed aspects of Spanish feudal society and during the 1690s adopted long lots as a rational system for distributing land equally. Long lots were central to his reforms because their use allowed efficient distribution of individual plots to numerous recipients. These plots were issued according to human needs rather than social status. Frenchmen, who probably knew of long lots as a rational system of land alienation, lived in New Mexico at that time and the Spanish had the opportunity to learn of long lots and adapt the system to their needs.<sup>186</sup>

Together, Carlson and Jordan claimed that the local

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<sup>185</sup> Carlson, *The Spanish American Homeland*, pp. 31-32, 53-55.

<sup>186</sup> Carlson, "Long Lots in the Rio Arriba," p. 53. Jordan, "Antecedents of the Long-Lot in Texas," pp. 71-82.

environment was probably responsible for initial long lot adoption, but this was the same type of environment to which the Spanish were accustomed which seemingly would have contributed to traditional land use decisions. Nonetheless, Jordan still believed that the Texas long lot was somehow tied to the French or French North American colonies, even though, apparently because he had no other explanation, he attributed the earliest use to independent invention.<sup>187</sup> Scholars must be cautious in proposing independent invention, and it should only be used as an explanation if the innovator can be named or other evidence can be presented. Logic suggests that some proof of independent invention is necessary, or the researcher should conclude that diffusion explains the origin of a cultural trait.

### **Long Lots in New Mexico**

A review of the historical evidence showed that Archibeque and Gurule--Frenchmen in New Mexico from the time of initial resettlement in 1693--influenced Spanish activities there. A French-like landscape emerged along with the arrival of the Frenchmen. Land records demonstrate that long lots appeared in 1695 in Santa Cruz, the first reformed Spanish agricultural settlement. The historical record demonstrates that both

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<sup>187</sup> Jordan, "Antecedents of the Long-lot in Texas," p. 80

Frenchmen, but especially Archibeque, were important people in the community at that time. Their influence makes them the most likely source of the long lot in New Mexico. Evidence supporting another conclusion has not materialized.

### **Long Lots in Texas**

At Los Adaes and Natchitoches, interaction took place between Frenchmen and Spaniards who were isolated and who had mutually unfulfilled needs. The historical record confirms their close cooperation on the Louisiana-Texas frontier, and indicates that cultural exchange took place between the French and the Spanish. The historical record also verifies French and Spanish collaboration along the Texas and Louisiana border. From this, I conclude that Natchitoches served as a diffusion node for French ideas going to Spanish territory.

Early French influence is evident across Texas. An unknown builder planned and constructed the Old Stone Fort, an enduring icon of the Spanish era in Nacogdoches after 1779. Also known as the Stone House, it was modeled after French colonial structures--according to the Stone Fort museum's curator, Carolyn Spears, and also James Corbin, noted archeologist from Stephen F. Austin State

University.<sup>188</sup> French place names, such as Etoile, the French word for star, appear on maps. A close look at the 1858 general land office map of Nacogdoches County reveals French family names such as Rambin. The Rambin family settled originally in Natchitoches on a long lot during the 1720s. Long lots around San Antonio probably diffused in the same way from Natchitoches, which served as the gateway to Texas from the east. The system was transported to San Antonio after 1721 by government officials rotating between Los Adaes and San Antonio.

In contrast to Natchitoches, there was an entry point from Mexico for Spanish ideas moving to the frontier. Patricia R. Lemee called Guerrero, Mexico, the “gateway” to Texas during the early colonial period. There, Spanish hot peppers, ranching traditions, and other cultural traits entered Texas and moved east. At Guerrero near a small creek draining into the Rio Grande, Lemee found Spanish irrigation works and agriculture fields predating those at San Antonio.<sup>189</sup> Map 7.1 shows the contemporary agricultural landscape of Guerrero. Notably, long lots are absent.

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<sup>188</sup> Personal conversations with Carolyn Spears, 1998-present, and James Corbin, 1998-2004. James Corbin died in Nov. 2004.

<sup>189</sup> Lemee, “Tios and Tantes: Familial and Political Relationships of Natchitoches and the Spanish Colonial Frontier,” p. 341.





By contrast, eighteenth century examples of long lots continue to be visible around modern San Antonio, as well as Natchitoches, so it seems more likely that the system entered Texas from the east.

While the viceroy and others planned for the colonization of San Antonio during the 1720s, they were being advised by officials from Los Adaes who were very familiar with the French at Natchitoches. It is known that the viceroy received help in planning for the Canary Islanders and was influenced by reports he received from Aguayo, Governor Almazan, and perhaps others returning from the Los Adaes-Natchitoches frontier. Significant fraternization had occurred between both colonies. The long lot seems to have been adopted by the Spanish after close contact with the French in order to accommodate the large numbers of settlers expected to immigrate to San Antonio in 1731.

### **Broader Implications**

Precipitated by the La Salle expedition, Frenchmen and Spaniards with diverse sets of knowledge made contact in a broad arc between Santa Fe and Natchitoches. In this region, ideas moved ever more fluidly as time passed to the end of the Spanish period. History provides numerous examples indicating that exchange occurred, even though exact details might be elusive. In one

instance, Fray Jesus Maria Casanas served at mission San Francisco de la Tejas near the Neches River in East Texas from 1690-1693 and found his way to New Mexico. Vargas assigned him to mission San Diego los Jemez where he worked until his death in 1696.<sup>190</sup> That elements of Casanas' East Texas experience would have moved with him to New Mexico seems obvious.

French people who took their culture with them went to New Mexico in small numbers during the late seventeenth and eighteenth century, but their influence was observed in Santa Fe by later explorers from the United States who even reported such esoteric facts such as that the Spanish harnessed their oxen in the manner of the French.

During the eighteenth century, across the frontier, settlements were repeatedly formed and abandoned.<sup>191</sup> Roads were planned and built across great distances.<sup>192</sup> People and ideas moved quickly as a result.<sup>193</sup> Among other examples, the Spanish governor

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<sup>190</sup> Kessel, *Spain in the Southwest*, p. 175.

<sup>191</sup> Bolton, *Athanase de Mezieres*, vol. 1, 2.

<sup>192</sup> Among others, Ralph Emerson Twitchell, *The Spanish Archives of New Mexico*, Volume 2 of 2 Volumes, The Torch Press, 1914, p. 308, record, 1007, reports plans to build a road from Santa Fe to Nacogdoches ca. 1788.

<sup>193</sup> R. B. Blake, "Robert Bruce Blake Research Collection," Vol. 18, Nacogdoches: East Texas Research Center, Stephen F. Austin State University. This volume contains census records from 1792-1809. The 1792 Nacogdoches census lists six people born in New Mexico. These sources describing the era further support the concept of cultural exchange that underlies the idea of the long lot diffusing from New France to Texas and New Mexico. The records also contain descriptions of long lots after the Spanish returned to Nacogdoches in 1779. Frenchmen are found in the census records of the population in Nacogdoches.

of Texas during the 1760s, a Frenchman named Athanase de Mezieres, reported on the abandonment of the East Texas settlement around Los Adaes and Nacogdoches. At this time, several hundred people were forced into exile at San Antonio after they had lived near the French for fifty years. That exchanges of culture occurred during this era seems obvious. That the diffusion of other ideas between indigenous people and Europeans who formed the character of Texas will come to light seems likely.

During the colonial era, there always was a Spanish-French connection, and through this the spread of technology and ideas occurred. The long-lot idea, associated with Frenchmen most everywhere they settled, appeared on the ground at the time of first settlement in both New Mexico and parts of Texas. In this dissertation, I found long lots in New Mexico five decades before once thought and demonstrated a pattern of diffusion from 1693-1731 that probably introduced them to New Mexico and Texas. This notable French connection seemingly disproves assumptions about independent invention. The evidence offered seems telling, and it portrays a story of cooperation among people who were supposed to be imperial rivals. Isolated in North America from European powers, people shared ideas and life on the frontier and constructed new and enduring institutions.

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Cammie G. Henry Research Center, Watson Library, Northwestern State University, Natchitoches, Louisiana. This institution holds collections of rare regional books, published primary source material, maps, and other material useful for studying the French Colonial era and the Spanish-French Colonial border.

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The Nacogdoches Archives, now located at the Texas State Library, Austin, Texas, contains valuable information from the Spanish and Mexican era. The archive may be viewed in a widely distributed microfilm collection of twenty-six reels. Robert Bruce Blake, a Nacogdoches County Clerk and Court Reporter familiar with colonial era Spanish documents, translated much of the Nacogdoches archive as a public service between about 1927-1955. The archives had been collected in ninety-three volumes which are available in several depositories including the ETRC, Nacogdoches where a detailed card catalogue supports research.

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